FINANCIAL TIMES

WEDNESDAY 16 NOVEMBER 2022 | INTERNATIONAL NEWSPAPER OF THE YEAR | EUROPE

Cracks appear in the US Treasuries market
BIG READ, PAGE 17

The year liberal democracy fought back
JANAN GANESH, PAGE 19

Putin answers Kyiv's peace terms with missile blitz

- Zelenskyy vows to fight on in winter
- Kremlin questions Ukraine's intent

CHRISTOPHER MILLER AND FELICIA SCHWARTZ — KYIV
MAX SEDDON — RIGA

President Volodymyr Zelenskyy has outlined Ukraine's conditions for a peace settlement to end the war with Russia, a move that drew a furious response from Moscow, which launched a wave of missile attacks on Kyiv and other cities.

Zelenskyy said yesterday that he was open to peace talks but stressed he would not pause the fighting over winter. His comments follow suggestions by some US officials, including military chief General Mark Milley, that winter might provide the opportunity to begin negotiations with Russia and that Ukraine may never be able to expel Russian forces from all its territory.

"We will not allow Russia to wait it out, build up its forces and then start a new series of terror and global destabilisation," Zelenskyy said in a video address to the G20 summit in Bali. "I am convinced now is the time when the Russian destructive war must and can be stopped," he added, snubbing Moscow by addressing leaders of the "G19".

Hours later, Russia launched repeated missile strikes on Ukraine. Zelenskyy said 85 missiles had been fired, "mostly at our energy infrastructure".

"It is clear what the enemy wants. It will not achieve what it wants," he said. "I know that the strikes cut off our power supply in many cities . . . We are working to fix that. We will restore everything, we will survive everything."

Ukrenergo, the state energy company, ordered power outages across the country and, "in particular, the capital".

Some western diplomats have privately said that talks could start on the basis of the front line that preceded Russia's full-scale invasion of Ukraine on February 24. In 2014, Russia annexed the Crimean peninsula and fuelled a war in the eastern Donbas region with the use of local proxy forces.

Ukrainian forces recaptured Kherson last week, dealing a significant blow to the Russian army that had occupied the southern provincial capital since March. Ukraine has regained more than half of its territory seized by Russian forces since February 24.

Kremlin spokesman Dmitry Peskov said Zelenskyy's plan was confirmation that Kyiv had "no desire to hold negotiations", state newswire Ria Novosti reported. President Vladimir Putin did not attend the G20 and was represented by Russia's foreign minister, Sergei Lavrov.

Dmytro Kuleba, Ukraine's foreign minister, wrote on Twitter after the missile strikes: "Russian missiles are killing people and ruining infrastructure across Ukraine right now. This is what Russia has to say on the issue of peace talks."

He added: "Stop proposing Ukraine to accept Russian ultimatums! This terror can only be stopped with the strength of our weapons & principles."

Jake Sullivan, the US national security adviser, said the strikes "will serve to only deepen the concerns among the G20 about the destabilising impact of Putin's war".

Russia-backed officials in Nova Kakhovka, a city on the river Dnipro's eastern bank near Kherson, were evacuated yesterday as fighting continued during a Ukrainian counter-offensive.

G20 to decry war & Grain deal page 2
Lex page 20

Eight billionth baby Global population shows its age as experts hail triumph of development

Orlando Barria/EPA-EFE/Shutterstock

Baby Damian makes his entrance into the world at Altagracia maternity hospital in Santo Domingo, Dominican Republic, yesterday. He was chosen to represent the country's contribution to the global population passing 8bn.

The world total is set to add 1bn more people in 15 years as the population becomes noticeably older.

With mortality and fertility rates falling, the number of people aged 65 and over is set to rise from 783mn this year to 1bn by 2030 and 1.4bn by 2043, UN population data revealed.

The spread of ageing reflects "a triumph of development efforts", said Norbert Meiners, professor at the Oxford Institute of Population Ageing. People are living longer thanks to improved nutrition, medical advances, sanitation, healthcare, education and economic progress, he added.

Experts say ageing is now a more pressing issue than population growth as societies suffer strains on tax revenues and healthcare. Others say fears are overblown, partly because of an outdated definition of "old". Those in their 60s can still contribute, they say.

Demographics page 4

Briefing

▸ Luxury spending set to defy global recession fears
Research has shown high-end shoppers are expected to splash out despite a possible recession, boosting the €353bn sector by up to 8 per cent next year.— PAGE 6

▸ $20bn Jakarta coal shift
Wealthy nations led by the US and Japan have offered Indonesia cash to pay for the coal-addicted country's shift to green energy.
— PAGE 4; PILITA CLARK, PAGE 14

▸ Gupta group reaches deal
Sanjeev Gupta's Liberty Steel has reached an outline deal with creditors in which they could recoup less than half what they lent the metals group.— PAGE 6

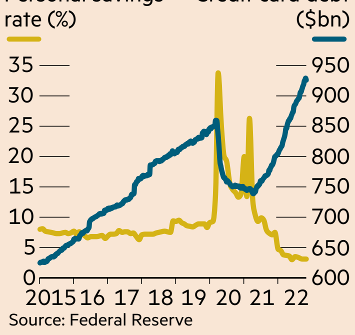
▸ German LNG hub finished
Berlin has hit a crucial milestone in its bid to end Russian energy dependency with completion of the Wilhelmshaven terminal on the North Sea.— PAGE 4

▸ Rich reward Walmart
The retailer known for its appeal to the cash-strapped has found favour with rich shoppers, lifting results despite a $3.1bn opioids settlement.— PAGE 6; LEX, PAGE 20

▸ Yen back from deep low
The currency has rebounded and stirred hope that a period of weakness is ending amid talk that the Federal Reserve will slow its rate rises.— PAGE 10

Datawatch

On the cards



Source: Federal Reserve

US credit card debt hit an all-time high of $930bn in October and is spiralling towards $1tn as more consumers turn to unsecured personal loans and credit cards to stave off the effects of inflation. At the same time, savings rates have plunged

China's police stations in Europe set off sirens

Analysis ▸ PAGE 2

Investigators pounce on FTX after collapse leaves up to 1mn creditors

JOSHUA OLIVER — LONDON

The collapse of Sam Bankman-Fried's crypto empire has sparked a vast global investigation, with dozens of authorities circling the company as lawyers warn there could be 1mn creditors in its bankruptcy proceeding.

FTX said in court filings it was in contact with US federal prosecutors, the Securities and Exchange Commission, the Commodity Futures Trading Commission and "dozens of federal, state and international regulatory agencies" in the three days since the cryptocurrency exchange and more than 100 affiliated companies filed for Chapter 11 bankruptcy in Delaware.

The companies face at least 100,000 creditors but that number could expand to more than 1mn, according to the filing. Most of the creditors were clients of Bankman-Fried's companies. "There is substantial interest in these events among regulatory authorities around the world," the filing said.

The statements provide details on the sprawling scale and complexity of the multibillion-dollar bankruptcy of Bankman-Fried's digital asset group, and the intense legal and regulatory scrutiny of the 30-year-old former billionaire's businesses.

"The events that have befallen FTX over the past week are unprecedented," the court filing said. "Barely more than a week ago, FTX, led by its co-founder Sam Bankman-Fried, was regarded as one of the most respected and innovative companies in the crypto industry."

Restructuring specialist John Ray, known for his work on Enron, has taken over the company after Bankman-Fried stepped down last Friday.

The US filing comes after financial regulators in the Bahamas appointed liquidators to run a key FTX entity as the country's authorities seek to "protect the interests of clients, creditors and other stakeholders globally".

The Securities Commission of the Bahamas said it had won court approval to appoint two partners from PwC to oversee the unwinding of FTX Digital Markets, an entity at the centre of the crypto group's vast trading platform.

Authorities in the Bahamas, where Bankman-Fried lived, are investigating FTX. It used its Nassau base to build a crypto derivatives trading operation that accepted money from customers.

The US filing confirmed FTX suffered a "cyber attack" on Friday, with research firm Elliptic estimating $477mn had been stolen in a hack of the exchange.

Nestcoin mauled page 9

Austria	€4.30	Morocco	Dh50
Bahrain	Din1.8	Netherlands	€4.30
Belgium	€4.30	Norway	NKr45
Croatia	Kn32/€4.25	Oman	OR1.60
Cyprus	€4.00	Pakistan	Rupee350
Czech Rep	Kc120	Poland	Zl 24
Denmark	DKr43	Portugal	€4.00
Egypt	E£59	Russia	€5.00
France	€4.30	Serbia	NewD530
Germany	€4.30	Slovenia	€4.00
Greece	€4.00	Spain	€4.00
Hungary	Ft1350	Switzerland	SFr6.50
India	Rup220	Tunisia	Din7.50
Italy	€4.00	Turkey	TL50
Luxembourg	€4.30	UAE	Dh23
Malta	€4.00		

Subscribe In print and online

www.ft.com/subscribetoday
email: fte.subs@ft.com
Tel: +44 20 7775 6000
Fax: +44 20 7873 3428

© THE FINANCIAL TIMES LTD 2022

No: 41,173 ★

Printed in London, Liverpool, Glasgow, Dublin, Frankfurt, Milan, Madrid, New York, Chicago, San Francisco, Tokyo, Hong Kong, Singapore, Seoul, Dubai

World Markets

STOCK MARKETS

	Nov 15	Prev	%chg
S&P 500	4019.20	3957.25	1.57
Nasdaq Composite	11483.94	11196.22	2.57
Dow Jones Ind	33793.62	33536.70	0.77
FTSEurofirst 300	1712.20	1705.81	0.37
Euro Stoxx 50	3906.77	3887.51	0.50
FTSE 100	7369.44	7385.17	-0.21
FTSE All-Share	4055.88	4067.93	-0.30
CAC 40	6641.66	6609.17	0.49
Xetra Dax	14378.51	14313.30	0.46
Nikkei	27990.17	27963.47	0.10
Hang Seng	18343.12	17619.71	4.11
MSCI World $	2653.94	2674.08	-0.75
MSCI EM $	939.78	935.73	0.43
MSCI ACWI $	614.79	618.66	-0.63
FT Wilshire 2500	5150.16	5201.26	-0.98
FT Wilshire 5000	40231.02	40630.30	-0.98

CURRENCIES

Pair	Nov 15	Prev	Pair	Nov 15	Prev
$/€	1.037	1.033	€/$	0.965	0.968
$/£	1.190	1.173	£/$	0.841	0.852
£/€	0.871	0.881	€/£	1.148	1.136
¥/$	139.240	140.415	¥/€	144.343	145.070
¥/£	165.653	164.748	£ index	77.295	77.579
SFr/€	0.980	0.977	SFr/£	1.124	1.110

CRYPTO

	Nov 15	Prev	%chg
Bitcoin ($)	16969.82	16588.42	2.30
Ethereum	1263.31	1240.78	1.82

COMMODITIES

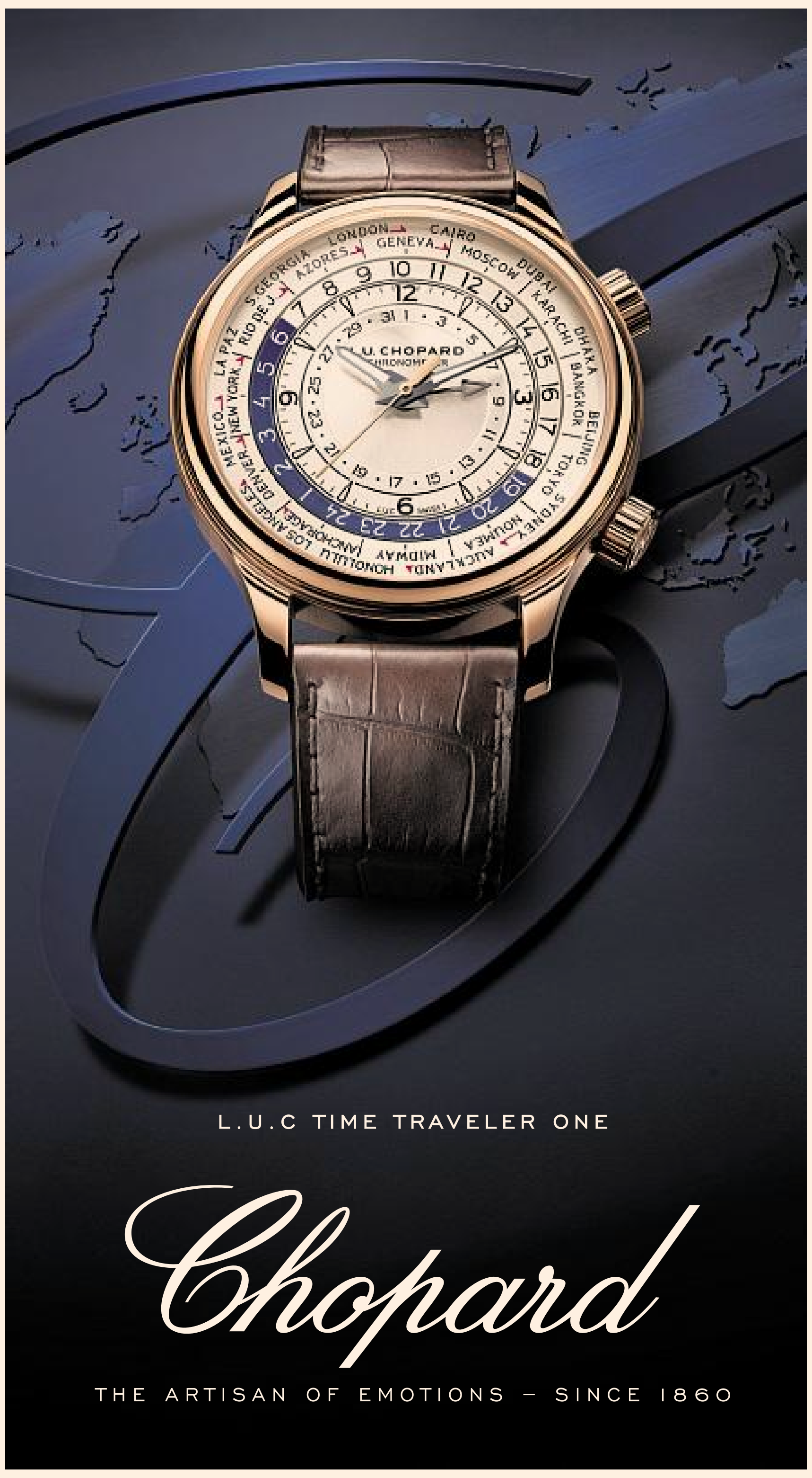
	Nov 15	Prev	%chg
Oil WTI $	86.12	85.87	0.29
Oil Brent $	93.27	93.14	0.14
Gold $	1768.90	1759.35	0.54

GOVERNMENT BONDS

Yield (%)	Nov 15	Prev	Chg
US 2 yr	4.36	4.40	-0.04
US 10 yr	3.81	3.87	-0.06
US 30 yr	3.98	4.06	-0.08
UK 2 yr	3.14	3.18	-0.04
UK 10 yr	3.29	3.36	-0.07
UK 30 yr	3.47	3.49	-0.03
JPN 2 yr	-0.05	-0.06	0.01
JPN 10 yr	0.24	0.24	0.00
JPN 30 yr	1.46	1.49	-0.03
GER 2 yr	2.16	2.17	-0.01
GER 10 yr	2.11	2.15	-0.04
GER 30 yr	2.05	2.10	-0.05

Prices are latest for edition
Data provided by Morningstar

A Nikkei Company



VISIT…

LANZAROTE Caliente.COM

Draft communiqué

G20 condemns war and nuclear threats

Statement's stronger than expected language comes after days of wrangling

HENRY FOY AND MERCEDES RUEHL
BALI

World leaders will state at the G20 summit in Bali that today's era "must not be of war" and will condemn threats to use nuclear weapons, reflecting rising anxiety about Russia's war against Ukraine.

A draft communiqué agreed by diplomats, seen by the Financial Times and confirmed by two delegations, said: "Most members strongly condemned the war in Ukraine and stressed it is causing immense human suffering and exacerbating existing fragilities in the global economy."

The language regarding the war and Moscow's repeated use of nuclear rhetoric is stronger than western officials forecast, and underscores rising concerns in non-western states about Russian president Vladimir Putin's invasion and its widespread effects.

Xi Jinping, China's president and Putin's most important global ally, said in his speech to other leaders that the G20 "must resolutely oppose the attempt to politicise food and energy issues or use them as tools and weapons", in some of his strongest language on the war's fallout.

The Chinese leader said the crisis in food and energy markets was caused by "interrupted supply chains" and added that "unilateral sanctions must be removed". Western countries maintain Russia's war has cut off Ukraine's food exports, while Moscow blames western sanctions for restricting its shipments.

Putin chose not to attend the summit in Bali, Indonesia, instead sending Sergei Lavrov, his foreign minister, who was due to leave the event last night, skipping the second day of talks.

Western leaders used their opening speeches to call on other countries, many of which have declined to publicly condemn Putin's invasion, to step up pressure on Moscow to end the conflict.

"The use or threat of use of nuclear weapons is inadmissible. The peaceful resolution of conflicts, efforts to address crises, as well as diplomacy and dialogue, are vital. Today's era must not be of war," the draft statement said.

The communiqué was agreed by country delegates on Monday night after days of wrangling between western officials and those from Russia and China. It will be formally adopted by G20 leaders today. The document's language "represents quite a diplomatic victory for us", said a western official involved in the negotiations.

Lavrov told Russian state news agencies western countries had attempted to "politicise" the communiqué by including an explicit condemnation of Moscow. "But let's do this in a fair way and let's make it clear that, on this topic, we have differences," he said of the talks.

India played a big role in achieving consensus among member states over the wording that criticised the Russian invasion, according to three officials with knowledge of the negotiations.

The draft communiqué stated that the war in Ukraine was "constraining growth, increasing inflation, disrupting supply chains, heightening energy and food insecurity, and elevating financial stability risks".

Additional reporting by Maiqi Ding in Beijing, Edward White in Seoul and Demetri Sevastopulo in Washington

Black Sea exports

Russia and Ukraine close in on grain deal extension

MAX SEDDON — RIGA
HENRY FOY — BALI
AYLA JEAN YACKLEY — ISTANBUL

Russia and Ukraine are close to agreeing to extend a deal securing Kyiv's grain exports via its Black Sea ports, a crucial step to alleviating a global food crisis triggered by the war.

Negotiators are confident the warring sides will extend the agreement before it expires on Saturday after reaching a compromise with Russia on payments for its own agricultural exports and reopening a pipeline carrying ammonia that passes through Ukraine, said four people familiar with the matter.

The deal, first struck with UN and Turkish mediation in July, is automatically renewed unless one party objects.

The extension is being negotiated by the UN, a process that involved bilateral meetings on the sidelines of the G20 in Bali, where António Guterres, UN secretary-general, held talks with Sergei Lavrov, Russian foreign minister.

Under the revised agreement, Russia would be able to use the same Black Sea route transporting the bulk of Ukraine's agricultural exports that is offering Kyiv an economic lifeline during the war.

In exchange for extending the deal, Russia will be able to use a pipeline that transports ammonia through Ukrainian-controlled territory before reaching a port near Odesa.

The pipeline, which carried about 2.3mn tonnes of ammonia before the invasion, could give Moscow an additional $2.4bn in export revenue at a time when western sanctions have hampered its ability to sell its grain and fertiliser.

Moscow had demanded the US and EU lift sanctions barring state-owned Russian Agricultural Bank, the main conduit for payments for Russia's agricultural exports, from the Swift financial payments system, the people said.

The US is likely to help secure correspondent relationships for the Russian lender at US banks instead of reinstating it to Swift, two of the people added.

Lavrov said Guterres had given assurances of the US and EU's "good intentions", which would remove obstacles to Russian grain and fertiliser exports.

He said the UN had passed on promises that "all the economic operators that participate in Russian fertiliser, grain and supply chains" would not face sanctions for trading in Russian grain. That would allow Russian ships to visit European ports, foreign ships to visit Russian ports, for the Russian bank to "work fully", and enable "decent" rates from insurers, Lavrov said.

Ismini Palla, UN spokesperson for the Black Sea Grain Initiative, said: "Discussions . . . with all parties are ongoing. We do not have something to announce at this stage." The Russian exports were a "separate agreement" and the UN and Russia had signed a distinct memorandum of understanding in July to facilitate the export of food and fertiliser from Russia.

Renewing the deal gives Ukraine an economic lifeline without fully accepting Russian demands. But opening the ammonia pipeline is politically sensitive in Ukraine, which is mindful of letting Russia make billions from fertiliser sales while Kyiv earns $100mn a year in transit revenue from the pipeline.

Security. Human rights

China's police outposts raise alarm in Europe

Criminals and dissidents targeted in expansion of 'service stations' abroad

YUAN YANG — LONDON

Undercover: a Chinese overseas police station has removed its signs in Budapest
Anna Szilagyi/AP

In 2018, police in China's eastern county of Qingtian declared they had set up 15 "police service stations" in cities across the world, their duties ranging from helping compatriots with paperwork to "gathering intelligence" and "resolving disputes among overseas Chinese".

In January this year, police in China's Fuzhou city said they had set up 30 "overseas service stations" from Buenos Aires to Tokyo in an announcement that initially drew little international notice.

But the facilities have alarmed European capitals wary of China's extraterritorial influence since Safeguard Defenders, a human rights charity, published the first detailed review into the stations in September.

The Netherlands has declared two stations in Amsterdam and Rotterdam illegal and ordered their closure. Ireland has demanded the closure of one in Dublin, and in the UK, Tom Tugendhat, security minister, told parliament that reports of undeclared Chinese police stations were "extremely concerning".

Beijing denies the stations have a role in policing, though the Qingtian force included "foreign police work" as a function of stations such as those it established in Barcelona and Budapest.

"As far as we are aware, the institutions you referred to are not 'police stations' or 'police service centres'," China's foreign ministry wrote in response to questions about the offices.

The ministry insisted the stations provided administrative services, such as driving licence renewals, but did not explain why such work could not be done by embassies or consulates.

"All venues are provided by overseas Chinese compatriot groups, and the volunteers are warm-hearted local Chinese compatriots. They are not Chinese police officers," it said.

Moritz Rudolf, a fellow at Yale Law School, said the stations' main functions were probably administrative support and civil mediation but they were also part of a wider ambition to enforce China's laws beyond its borders.

"Since 2019, China has been passing more laws with extraterritorial applications, a normal behaviour for an emerging power," said Rudolf, who is researching the implications of China's rise on the international legal order.

"China tries to catch up with the US but it is not even close when it comes to enforcing its domestic laws abroad, particularly in Europe," he said.

Qingtian police have said they use their stations to support Beijing's "persuade to return" campaign, which circumvents formal extradition processes by harassing suspects to return.

The campaign is part of an effort to pursue those Beijing sees as criminals abroad, a drive intended to crack down on transnational offences such as online fraud and to pursue political targets.

China's official police newspaper has reported that the stations helped Qingtian police "achieve new breakthroughs in pursuing fugitives overseas". In one case, a fraud suspect returned from Serbia after police contacted him via one of the stations.

Du Hangwei, vice-minister of public security, said in April that 210,000 fraudsters had been "persuaded" to return from overseas in 2021. He gave no details of the methods used.

Wang Jingyu, a Chinese dissident living in the Netherlands, said he had been called hundreds of times since February 2022 from a number listed as that of a station established by Fuzhou police.

"They told me to go to the Rotterdam overseas police station to hand myself in, and to think of my parents back in China," he said. "I didn't think it was real: how could there be a Chinese police station here?"

Peter Dahlin, founder of Safeguard Defenders, said Beijing was using extra-legal pressure to force citizens to return.

"Some of these people are good people, some of them are bad people, but the issue is about the right to a fair trial and freedom from torture," he said.

In Dublin, the Chinese embassy said the Fuzhou-established station was a local rather than national initiative. But Simon Coveney, foreign minister, said it remained "completely unacceptable".

> 'They told me to go to Rotterdam overseas police station to hand myself in, and to think of my parents back in China'

Since coming under increased scrutiny, some sites have adopted a lower profile. Two signs identifying a station in Budapest have been removed from the shopfront it shares with the Hungary Qingtian Hometown Association. When called this month, many of the office numbers listed by Chinese media went unanswered.

Closing the stations will not end Beijing's desire to extend its reach. The 2020 Hong Kong national security law makes it an offence for anyone, anywhere, to support the city's independence. A law that takes effect in December criminalises overseas online fraud scams that have victims in China.

In October, the European Court of Human Rights blocked the transfer of a Taiwanese national from Poland to China. Credible reports of "torture and other forms of ill-treatment" amounted to a "general situation of violence" in Chinese jails, the court ruled.

Additional reporting by Maiqi Ding in Beijing and Jude Webber in Dublin

FINANCIAL TIMES
Bracken House, 1 Friday Street, London EC4M 9BT.

Subscriptions & Customer service
Subscription offers: www.ft.com/subscription
Contact: +44 207 775 6000, fte.subs@ft.com
Manage your personal account: mma.ft.com
Advertising
Tel: +44 20 7873 4000, advertising@ft.com
Letters to the editor
letters.editor@ft.com
Executive appointments
Tel: +44 20 7873 4909
www.exec-appointments.com

Published by: The Financial Times Limited, Bracken House, 1 Friday Street, London EC4M 9BT. Tel: +44 20 7873 3000; Fax: +44 20 7407 5700. Editor: Roula Khalaf.

Germany: Demirören Media, Hurriyet AS-Branch Germany, An der Brucke 20-22, 64546 Morfelden-Walldorf, +49 6105 327100. Responsible Editor, Roula Khalaf. Responsible for advertising content, Jon Slade.
Italy: Monza Stampa S.r.l., Via Michelangelo Buonarroti, 153, Monza, 20900, Milan. Tel. +39 039 28288201 Owner, The Financial Times Limited; Rappresentante e Direttore Responsabile in Italia: I.M.D.Srl-Marco Provasi - Via G. Puecher, 2 20037 Paderno Dugnano (MI), Italy. Milano n. 296 del 08/05/08 - Poste Italiane SpA-Sped. in Abb.Post.DL. 353/2003 (conv. L. 27/02/2004-n.46) art. 1 .comma 1, DCB Milano.
Spain: Bermont Impresion, Avenida de Alemania 12, CTC, 28821, Coslada, Madrid. Legal Deposit Number (Deposito Legal) M-32596-1995; Publishing Director, Roula Khalaf; Publishing Company, The Financial Times Limited, registered office as above. Local Representative office; C/ Infanta Maria Teresa 4, bajo 2, 28016, Madrid. ISSN 1135-8262.
UAE: Masar Printing & Publishing, P.O. Box 485100, Dubai. Editor in Chief: Roula Khalaf.
France: Publishing Director, Jonathan Slade, 46 Rue La Boetie, 75008 Paris, Tel. +33 (0)1 5376 8256; Fax: +33 (01) 5376 8253; Commission Paritaire N° 0919 C 85347; ISSN 1148-2753.
Turkey: Dunya Super Veb Ofset A.S. 100. Yil Mahallesi 34204, Bagcilar- Istanbul, Tel. +90 212 440 24 24.
Sweden: Responsible Publisher - Christer Norlander

© Copyright The Financial Times 2022.
Reproduction of the contents of this newspaper in any manner is not permitted without the publisher's prior consent. 'Financial Times' and 'FT' are registered trade marks of The Financial Times Limited.

The Financial Times and its journalism are subject to a self-regulation regime under the FT Editorial Code of Practice: www.ft.com/editorialcode

Reprints are available of any FT article with your company logo or contact details inserted if required (minimum order 100 copies).
One-off copyright licences for reproduction of FT articles are also available.
For both services phone +44 20 7873 4816, or email syndication@ft.com

World Cup Qatar's footballers help gulf state forge national identity

JOSH NOBLE — DOHA

Hosts Qatar will kick off the 2022 World Cup ranked 50th in the world, the third lowest in the competition. Of those that qualified, only Saudi Arabia and Ghana are deemed weaker in Fifa's rankings. Ecuador, Qatar's opponents on Sunday, sit just above them in 44th spot.

Yet this still marks a steep rise since Qatar was awarded the tournament in 2010. Back then it was ranked 113th, below Syria and Haiti.

"They will be tough to beat. They will be well organised and they will score goals," said Ross Griffin, an expert in sport and culture at Qatar University.

The transformation of Qatar's national team mirrors that of the wealthy Gulf state itself, with vast sums of money from gas exports used to build infrastructure, import global expertise and lay the foundations of national identity in a place where only a tenth of the population has full citizenship.

In 2010, only 5 per cent of the team was born in Qatar, according to Christos Anagnostopoulos, professor of sport management at Hamad Bin Khalifa University in Doha. At this World Cup, Qatar's first, the figure will be closer to 90 per cent. "This is a legacy of the World Cup before it even starts," said Anagnostopoulos. "They had a vision and they had a specific plan for how to get closer to that vision."

It is unclear how many of the current team have full citizenship. Some were born in Doha to non-Qatari parents, such as winger Akram Afif, while a handful of others, including star striker Almoez Ali, were born elsewhere but raised in Qatar from a young age. Only three were naturalised as adults.

"The stereotype is that Qatar doesn't have Qataris playing for them — they just have mercenaries," said Griffin. "These players were born here. They went to school here."

At the heart of Qatar's football project is the Aspire Academy, an elite sports training school lavished with state funding. It has trained and educated thousands of young athletes since 2004, mainly in football but also other sports.

"The facilities are unbelievable. You will arguably not find anything comparable in the world," said Michael Browne, one of the head coaches at Aspire from 2004 to 2012.

Qatar's football transformation predates its World Cup ambitions and has proven to be a powerful tool for building a national story for a country that is just over 50 years old.

The tiny Gulf state had faced sharp criticism for its reliance on imported players. In 2004, Qatar tried to naturalise three Brazilian players — none of whom had any previous connection to the country — in the space of a week. A decade later, its men's handball team, with more than two-thirds of its squad foreign born, came second in the World Cup. The result prompted Fifa to warn Qatar that such practices would not be tolerated in football.

Money has certainly greased the wheels of Qatar's success. Along with building a world-class training facility, it has been able to attract top coaches and sports scientists.

The Aspire academy's efforts began to yield results when Qatar won the Asian U19 championship in 2014. Five years later, Qatar won the Asian Cup for the first time, beating Japan 3-1 in the final. More than two-thirds of the squad had been trained at Aspire, including goalkeeper Saad al-Sheeb, pictured.

But Aspire has not been without controversy. In Fifa's internal report into the bidding process for the 2022 World Cup, investigators found evidence that the academy's resources had been used to "curry favour" with executive committee members. Qatar has always denied any wrongdoing.

In international football, nationality is a relatively fluid concept, with some players choosing to represent their country of birth or where they grew up, while others choose their parents' or even grandparents' home country.

While Doha's strict laws bar those born to foreign parents from becoming full citizens, Qatar's footballers were still performing a vital role in helping to forge a national identity, said John McManus, an anthropologist and author of *Inside Qatar*, a book about the Gulf state's elites. "This is a really young country," he said. "There are a lot of other identities at play there, so you need national totems."

Central banks to rein in 'jumbo' rate increases as outlook darkens

Monetary policymakers signal smaller rises to come amid fears of recession

VALENTINA ROMEI — LONDON

Central bankers are to shift towards a more gradual monetary tightening, economists predict, as recent "jumbo" rate moves show signs of taming inflation and officials acknowledge the growing threat of recession.

After central banks' last meetings and a cooling in US inflation from 8.2 per cent in September to 7.7 per cent in October, markets are pricing in a greater probability of 50 basis point rather than 75bp rises in the next announcements by the US Federal Reserve, European Central Bank, Bank of England, Swiss National Bank and Bank of Canada, and smaller rate rises into next year.

The Fed, ECB and BoE have given a "clear signal" that "we're coming towards a period of slower tightening, mirroring what we've seen from Australia, Canada and Norway", said James Pomeroy, economist at HSBC.

Monetary policymakers believed the aggressive rounds of tightening were having an effect on consumer prices, said Jennifer McKeown, chief global economist at Capital Economics. "We expect central banks to slow the pace of rises due to a combination of weakening economies, easing domestic price pressures and the fact that interest rates are above or reaching equilibrium levels [where activity is neither restricted nor boosted]," she said.

> 'The more aggressive moves appear to be coming to an end, with a gentler strategy expected'

Capital Economics expects that most of the next moves across the more than 20 central banks it tracks to be rate rises of 50bp or 25bp.

Hawks in the world's central banks won the battle of ideas over the autumn, announcing interest rate rises of a magnitude last seen decades ago. Together, 20 leading central banks have increased rates by a total of nearly 11 percentage points since August, showing the recent direction of travel in monetary policy. The Bank of Japan is an outlier as it has not raised rates since 2007 and is not forecast to increase them any time soon, while Russia and Turkey have cut rates.

The Fed, ECB, BoE and BoC alone increased rates by a total of 5.5 percentage points over that period, with all of them delivering at least one 75bp increase. The Fed had not raised rates by 75bp since 1994 but has delivered four consecutive rises of that size since June, with the main federal funds rate now 3.75 to 4 per cent.

The ECB's 75bp rises in September and October, taking the deposit rate to 1.5 per cent, were the biggest tightening moves in its 24-year history, while the BoE's similar increase in November was its largest in more than four decades, leaving the rate at 3 per cent.

With policy rates now much closer to their equilibrium or "neutral" level and economic activity weakening, "the case for scaling back policy tightening . . . has strengthened", said Ben May, global economist at the consultancy Oxford Economics.

There are many signs of weakening output. S&P Global's purchasing manager indices indicated a deepening downturn for the US, UK and eurozone in October. The global index of new orders dropped to its lowest level since spring 2020, at the height of the pandemic. Consumer and business confidence levels are near record lows in many countries as high inflation and a surge in borrowing costs hit household and corporate spending.

Economists are revising down their growth forecasts for 2023 for the wealthiest countries and expect output to decline in Germany, Italy and the UK.

Market expectations for next summer have also eased. Based on derivative products such as interest rate swaps, expectations for the ECB deposit rate next summer had soared from less than 1 per cent in early August to 3 per cent in September, but they have not been raised since then.

In the UK, higher rates were priced in after aggressive tax cuts were announced in September's "mini" Budget. But with these cancelled as part of the new government's more modest fiscal plans, expectations for next summer have largely returned to their mid-September levels of 4.6 per cent.

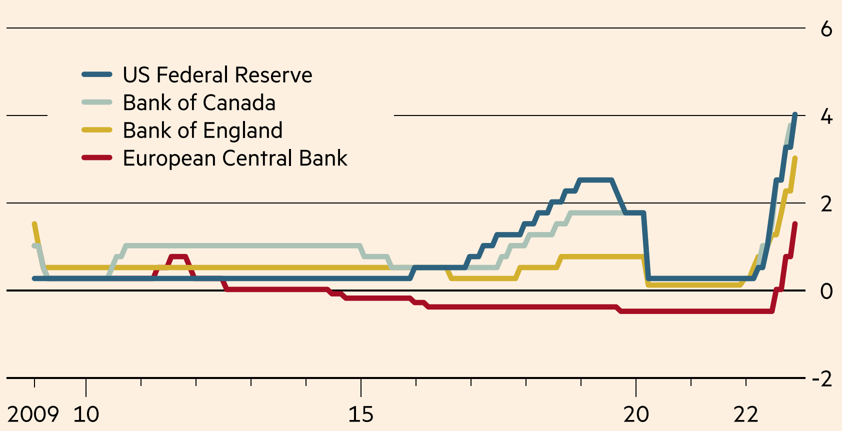
Susannah Streeter, senior investment analyst at asset manager Hargreaves Lansdown, said it was "sensible" to expect smaller increases in the UK, "especially with a recession forecast that could last two years and bring deflationary pressures".

In the US, market expectations for next summer continue to rise after Jay Powell, the Fed chair, warned that rates would peak at a higher level than expected. However, even the Fed may be adjusting policy as the recent rate rises begin to reduce economic activity.

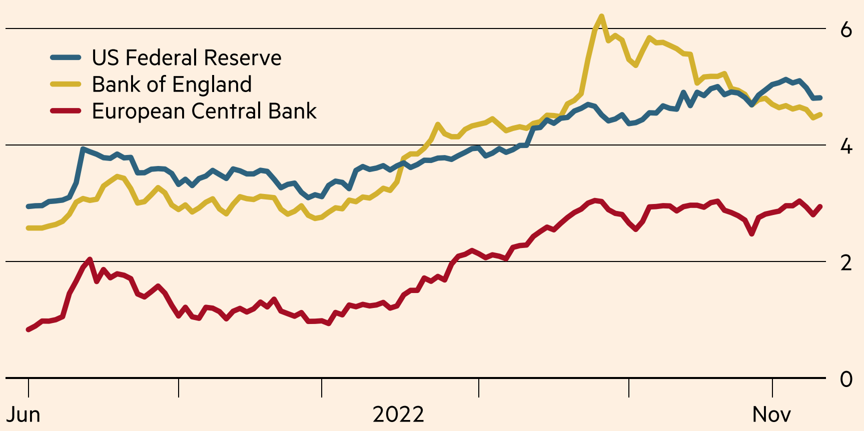
"The more aggressive moves appear to be coming to an end, with a gentler strategy expected in the months to come," said Streeter.

Martin Wolf see Opinion

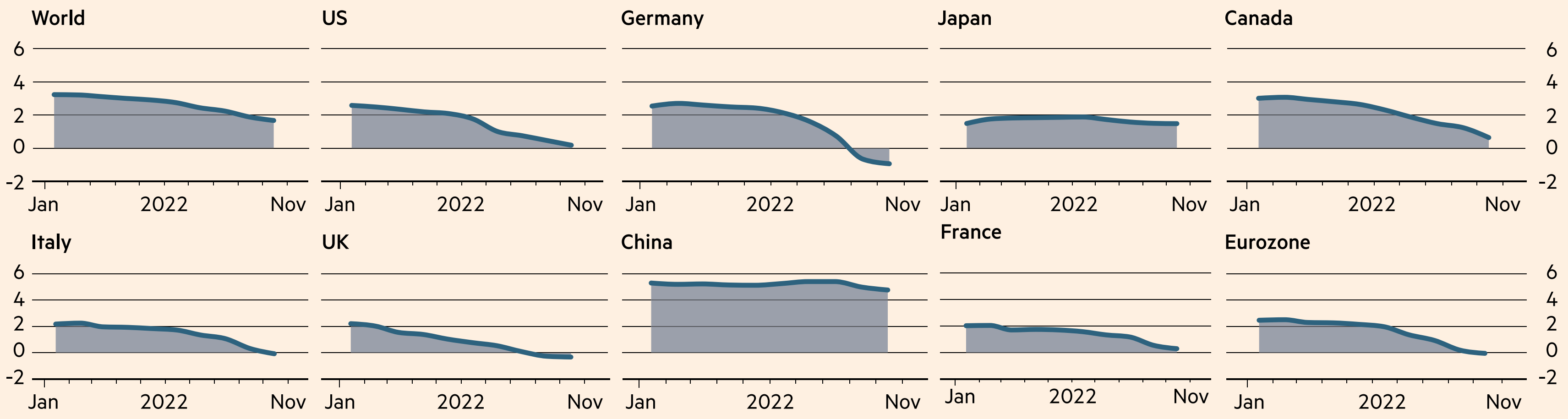
Interest rates have risen sharply
Key policy rate (%)



Some policy rate expectations for next summer have stabilised
Markets' implied interest rate at July/Aug 2023 monetary policy meetings



Economists are revising down their 2023 economic growth forecasts
Annual % change, by date of forecast



Sources: Refinitiv; Consensus Economics

Growth blow

Japanese economy contracts as consumer spending slows

KANA INAGAKI — TOKYO

Japan's economy saw an unexpected contraction for the first time in a year on the back of surging import bills in the third quarter, caused by the yen's plunge to multi-decade lows.

Gross domestic product in the July to September period shrank 1.2 per cent on the previous year. Japan faced a surge in Covid-19 cases in the summer that slowed a rebound in consumer spending for Asia's largest advanced economy.

Economists expect growth to pick up towards the end of the year with the return of tourism and the rollout of Prime Minister Fumio Kishida's $200bn spending package to ease the impact on households of soaring commodity prices and a weaker yen.

The fall in Japan's GDP contrasts with economists' expectations of a 1.1 per cent rate rise and second-quarter growth of 4.6 per cent. The data translated to a real quarterly drop of 0.3 per cent, compared with forecasts of 0.3 per cent growth, according to initial figures from the cabinet office yesterday.

Household spending continued to rise but only by 0.3 per cent compared with 1.3 per cent in the second quarter, as savings accumulated during the pandemic helped consumers weather rising living costs.

Export growth of 1.9 per cent was widely outpaced by a 5.2 per cent rise in Japan's imports bill, reflecting the weaker yen and trade environment.

Since September, authorities have carried out several interventions to prop up the yen, which fell to a 32-year low last month because of a widening gulf between the Bank of Japan's super-dovish monetary policy and tightening by other big central banks.

Real gross domestic income also fell a sharper than expected 3.9 per cent during the quarter. Yoshiki Shinke, senior executive economist at Dai-ichi Life Research Institute, said the drop indicated further downside risks to the economy, since sluggish wage growth would mean consumer spending might not grow strongly beyond the anticipated pent-up demand caused by the pandemic.

Economists expect Japan to outperform other advanced economies next year, since it still has room for further recovery from the pandemic and the economy will be supported both by government spending and the BoJ's ultra-loose policy.

"Still, it is hard to be optimistic about the outlook for the economy just because of the stimulus measures, since the economic impact of tightening by central banks globally will start to be felt from next year and Japan's economy will slow down if overseas economic conditions deteriorate," Shinke pointed out.

Yen rebounds see Companies & Markets

Energy security

LNG site eases German gas rationing fears

Completion of facility in 200 days a crucial part of ending Russia dependence

GUY CHAZAN — BERLIN
DAVID SHEPPARD — LONDON
CAMILLA HODGSON — SHARM EL-SHEIKH

Germany has finished construction of its first import terminal for liquefied natural gas, a milestone in its efforts to end its energy dependency on Russia.

The completion of the terminal, at Wilhelmshaven on the North Sea, will ease fears Europe's largest economy might face gas rationing this winter.

Germany has been striving to build new import infrastructure for gas since Moscow's full-scale invasion of Ukraine on February 24, which led to a sharp decline in Russian gas supplies.

Earlier this year, it chartered five floating storage and regasification units (FSRUs), one of which will be installed at Wilhelmshaven and the other at nearby Brunsbüttel by the end of the year. The first LNG tankers are due to dock at the two sites early next year.

German economy minister Robert Habeck pointed out that the Wilhelmshaven terminal had taken just 200 days to build — a major achievement for a country where construction projects can drag on for years.

"Germany can be fast and advance infrastructure projects with great determination when the federal and regional governments, together with the project participants, all pull together," he said.

Henning Gloystein, a consultant at Eurasia Group, said Wilhelmshaven's completion marked a "significant" step in Europe's attempts to "wean itself off Russian gas this winter, something that was deemed impossible at the start of Russia's invasion of Ukraine".

Earlier this year, Germany was haunted by fears of a looming winter gas shortage, especially after Russia drastically reduced flows through the Nord Stream 1 pipeline across the Baltic Sea.

Those fears have eased in recent weeks. Germany's gas storage is 100 per cent full, partly because unusually mild temperatures meant private households consumed less gas. Industrial use of gas also dropped 27 per cent in October, while German gas imports from the Netherlands, Belgium and Norway have increased slightly over the past few weeks and France started to deliver gas to Germany in mid-October.

That has had a big impact on gas prices in Europe, which are about one-third the level in August. But prices remain almost three times the long-term average and have started to climb again this week, with Berlin forecast to see freezing temperatures by Friday.

The German government has had to spend tens of billions of euros to backstop gas purchases from alternative sources and to nationalise Uniper, the country's biggest buyer of Russian gas. Uniper will operate the port infrastructure in Wilhelmshaven and has already started work on a connection between the FSRU and shore-based installations.

The economy ministry said three further FSRUs would be deployed in the coming months — one in Stade on the Elbe river near Hamburg and two in Lubmin on the Baltic Sea — and an additional one in Wilhelmshaven in the fourth quarter of 2023.

Demographics. UN data

World population passes 8bn and grows older

Mortality is falling but fertility rate also declines as global median age increases to 30

VALENTINA ROMEI AND ALAN SMITH
LONDON

The world's population reached 8bn yesterday and will hit 9bn in 15 years amid an unprecedented surge in the number of older people, according to the latest UN data.

The global fertility rate has more than halved since the 1950s to 2.3 births per woman. With mortality also falling, the number of people aged 65 and over is expected to rise from 783mn in 2022 to 1bn by 2030 and reach 1.4bn by 2043, the UN population data revealed.

This increase of 623mn in 20 years compares with the seven decades it took for the population of over-65s to increase by 651mn to its current total. The overall global population is set to peak at 10.4bn in the 2080s.

In contrast, the number of those under 15 is thought to have peaked last year at 2bn while the share of those aged 15 to 64, traditionally considered the working age, is falling.

"The coming decades will be marked by a rapid increase in the number of older persons, as the large cohorts born in the middle of the last century grow older," said Sara Hertog, a UN population affairs officer.

The global median age has increased by about eight years to 30 since 1950, and is set to rise to 36 by 2050, a figure that jumps to over 50 in east Asia and southern Europe, UN data show.

The spread of ageing is "a triumph of development efforts", said Norbert Meiners, professor at the Oxford Institute of Population Ageing. People are living longer because of improved nutrition, medical advances, sanitation, healthcare, education and economic progress, he said.

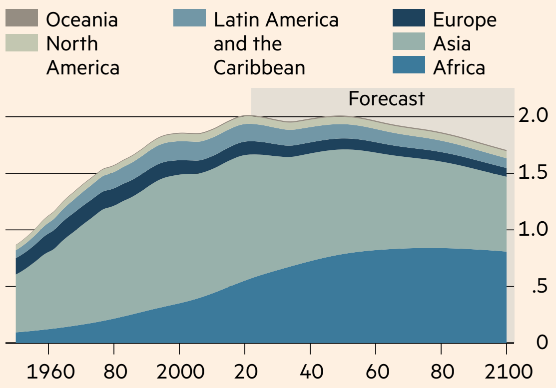
Ageing, not population growth, is "the most important demographic change of this century," said Michael Hodin, executive director of the Global Coalition on Ageing.

Ageing is a major challenge for societies and economies as it puts extra strain on fiscal revenues and healthcare spending. The number of people aged 80, those more closely associated with health problems, rose to more than 150mn this year. This is more than double the figure 20 years ago.

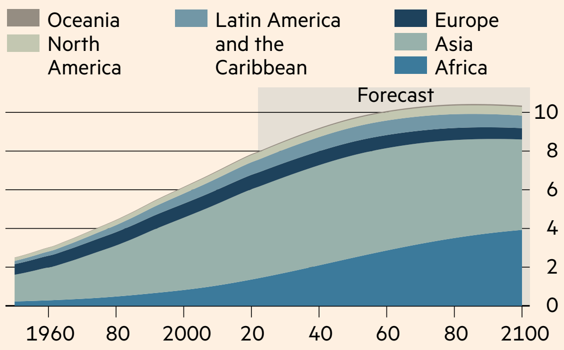
In response, many countries have started increasing the state retirement age from 65.

Many mouths to feed: a market in New Delhi, India. Developing countries in Asia are ageing faster than developed ones, adding to pressure on workers
Altaf Qadri/AP

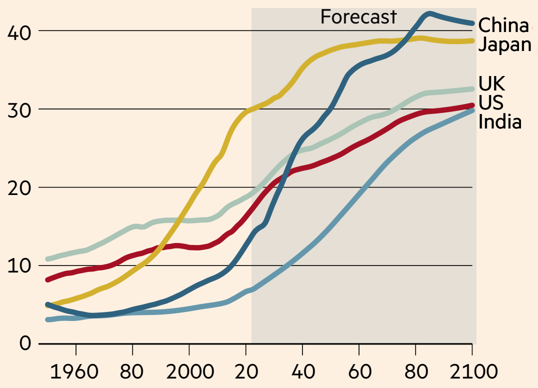
Number of children has already peaked
People aged 0-14 (bn)



Global population is set to plateau at about 10bn
Total population (bn)



Ageing is a global phenomenon
Share of population aged 65 and over (%)



Source: UN population prospects

Without further policy action, from childcare support to healthcare provision, the declining share of the working age population in advanced economies is "expected to drag down growth and living standards", said Shruti Singh, an economist at the OECD Centre for Opportunity of Equality.

Hodin added that nations' healthcare systems also needed to shift focus to earlier detection and prevention or "we won't be able to afford anything".

About 30 per cent of Japan's population is aged 65 and over, while in Europe the proportion is 20 per cent, double the global average and the highest of any continent.

For Europe and North America, the UN's Hertog said, all population growth to 2050 was likely to occur among older people.

While still younger overall, developing countries in Latin America and Asia are now ageing faster than developed ones. The largest increase in the number aged over 65 globally between now and 2050 is projected for east and south-east Asia, accounting for more than one-third of the global rise, the UN found.

For Latin America and the Caribbean, the share of the population aged 65 and over could more than double from 9 per cent in 2022 to 19 per cent in 2050.

However, some experts said the concerns over ageing were exaggerated, partly because of an outdated definition of older people.

"Most people in their 60s who are educated are very able to contribute to modern economies," said Sarah Harper, professor of gerontology at Oxford university.

> 'Most in their 60s who are educated are able to contribute to modern economies . . . the important factor is good health in later life'

Indeed, the mortality rate, the number of deaths in an age group per 1,000 population in the same age group, of those aged 65 to 69 in 1950 was higher than those aged 75 to 79 years today, according to UN data.

People are living healthier lives for longer across the globe, World Health Organization data show. A rising share of older people are in work, according to the OECD, even though employment rates in most countries still drop significantly with age from people's early 60s.

With many people in their 60s working and contributing to the economy and society, "the important factor is good health in later life", Harper added.

"If we can maintain that then the demographic challenge is reduced."

Renewables

Rich nations agree $20bn deal to help Indonesia shift from coal

AIME WILLIAMS — WASHINGTON
MERCEDES RUEHL — BALI

Wealthy nations led by the US and Japan have offered Indonesia a $20bn package to help pay for the coal-dependent country's shift to renewable energy as world leaders attempt to lure developing economies from fossil fuels.

The deal, which includes $10bn in public funding and a further $10bn from private sector investors, was unveiled during the G20 meetings in Bali yesterday after more than a year of negotiations between leaders.

As part of the agreement, Indonesia has pledged to cap power sector emissions at 290 megatons of CO_2 annually by 2030 and to generate about a third of its power from renewable sources by the same year. Indonesia is a coal-producing nation and one of the world's biggest carbon emitters.

Its new commitment to reach peak emissions by 2030 is seven years earlier than under previous pledges and includes on-grid, off-grid and captive power systems in the calculation. The country agreed that its power sector would achieve net zero by 2050.

The Just Energy Transition Partnership offers a mix of concessional finance, grants and loans from the US, Japan, Canada, the UK and several European countries, including the EU and Norway.

The deal is the second in what is seen as a series for emerging nations to be given incentives to stop using the dirtiest fossil fuels. The first was an $8.5bn deal with South Africa, and talks are under way with Vietnam.

The deal is a victory for Joko Widodo, Indonesia's president, who is in his second and final term. South-east Asia's largest economy possesses huge quantities of clean energy, including hydro and geothermal powers, and Jokowi, as he is known, has been eager for multinationals to provide financing and technology to tap into that potential.

Arsjad Rasjid, chair of the Indonesian Chamber of Commerce and Industry, said the investment was a landmark moment. "More countries and organisations are beginning to understand the need for an energy transition and the dilemma developing countries are facing," he said.

But Indonesia's environmental record has still been criticised. Land use change, which includes deforestation and forest fires, accounts for a large part of greenhouse gas emissions while the country is reliant on dirty coal-fired power as energy for its growing number of nickel-processing plants.

Private sector contributions were expected from lenders and investors making up the Glasgow Financial Alliance for Net Zero, a coalition of more than 500 financial institutions, including Citibank, Deutsche Bank, HSBC and Standard Chartered, a US official said.

John Kerry, US climate envoy, said the deal was "groundbreaking" and that all partners were "proud". "We've built a platform for co-operation that can truly transform Indonesia's power sector from coal to renewables and support significant economic growth," he said.

The two sides have agreed to deliver a plan within three to six months for investments, financing and technical support to meet the reduction targets.

Legal Notices

THE COMPANIES ACT (2022 REVISION)

NOTICE OF INTENTION TO DECLARE SECOND INTERIM DIVIDEND

SUNTECH POWER HOLDINGS CO., LTD. (IN OFFICIAL LIQUIDATION) (THE COMPANY)

GRAND COURT CAUSE NO. FSD 143 OF 2013 (RPJ)

TO: THE CREDITORS OF THE COMPANY

TAKE NOTICE that the Official Liquidator intends to declare an interim dividend.

Any creditor wishing to participate in the second interim dividend must lodge his proof of debt with the Official Liquidator no later than 16 December 2022, failing which you will be excluded from the second interim distribution, but you will not be excluded from any subsequent distribution or the final distribution.

Proof of debt forms can be obtained from the Official Liquidator using the contact details below.
Dated this 8th day of November 2022.

Simon Conway
Joint Official Liquidator

Contact for Enquiries: Sarah Moxam
Sarah.moxam@pwc.com
Telephone: + 1 345 914 8634

Address for Service: PwC Corporate Finance & Recovery (Cayman) Limited
18 Forum Lane
Camana Bay
Grand Cayman KY1-1104
Cayman Islands

Businesses For Sale

Business for Sale, Business Opportunities, Business Services, Business Wanted, Franchises
Runs Daily

Classified Business Advertising
UK: +44 20 7873 4000 | Email: advertising@ft.com

Agriculture

COP27 host Egypt grapples with climate change problems

HEBA SALEH — KAFR AL-BATIKH

Saied Aboul Souod, a farmer in Egypt's Nile Delta, scooped up a handful of mud and squeezed it in his fingers. "I haven't watered here for more than a month, but look how wet it is," he said.

Rising levels of underground water at his farm in Kafr al-Batikh, by the Mediterranean, have forced him to uproot 80 damaged guava trees and have killed the palm trees he tried to grow instead.

Experts say climate change is partly responsible for the problems faced by Aboul Souod and many of his neighbours in the Delta, Egypt's richest agricultural region with a population of 40mn. Egypt, host of this year's COP27, the UN conference on global warming, is "extremely vulnerable" to climate change, according to the World Bank. Egypt is home to 110mn, reliant mostly on the Nile for water, yet it struggles with an insufficient supply.

A fifth of its labour force is in agriculture, a sector set to bear the brunt of global warming as rising sea levels and salt water intrusion in aquifers aggravate drainage problems and soil and water degradation, officials and scientists say.

"Climate change could lead to a drop in agricultural yields in Egypt by 15-20 per cent by 2050," said Ali Abousabaa of the International Center for Agricultural Research in the Dry Areas.

"This is mainly from a potential rise in temperatures, and the potential degradation of soil because of degraded water quality." Such a drop would impact both food security and export crops, experts say. Agriculture accounts for about 11.3 per cent of gross domestic product.

Rising sea levels are predicted to lead to the loss of a sizeable proportion of the Nile Delta, the World Bank has said.

Egypt was already suffering more frequent heatwaves, and sand storms were forecast to worsen as temperatures rose, said Mohamed Ali Fahim, head of climate change at the ministry of agriculture. As he and others point out, per capita water share is 560 cubic metres, below the internationally defined water poverty line of 1,000 cu m per person.

Egypt has been trying to treat and reuse agricultural drainage water, even domestic sewage, for irrigation. Agriculture accounts for about 80 per cent of water use, and as the country becomes hotter, its water needs are expected to grow. "There will be more evaporation from the Nile and a need for more irrigation water as there will be more evapotranspiration from plants," said Atika Ben Maid at the French Development Agency in Cairo, referring to the process by which water moves from the earth to the air through evaporation and transpiration. The agency is part-funding an expansion of Egypt's huge Gabal Asfar domestic sewage water treatment plant.

Soil degradation linked to climate change is posing a threat to crops in the usually fertile Nile delta region

The Nile has been the focus of a dispute with Ethiopia, where most of the river's waters originate. It is building the Grand Ethiopian Renaissance Dam (GERD) to generate hydropower. Addis Ababa has refused calls from Cairo for a deal to regulate water discharge from the dam, especially during droughts.

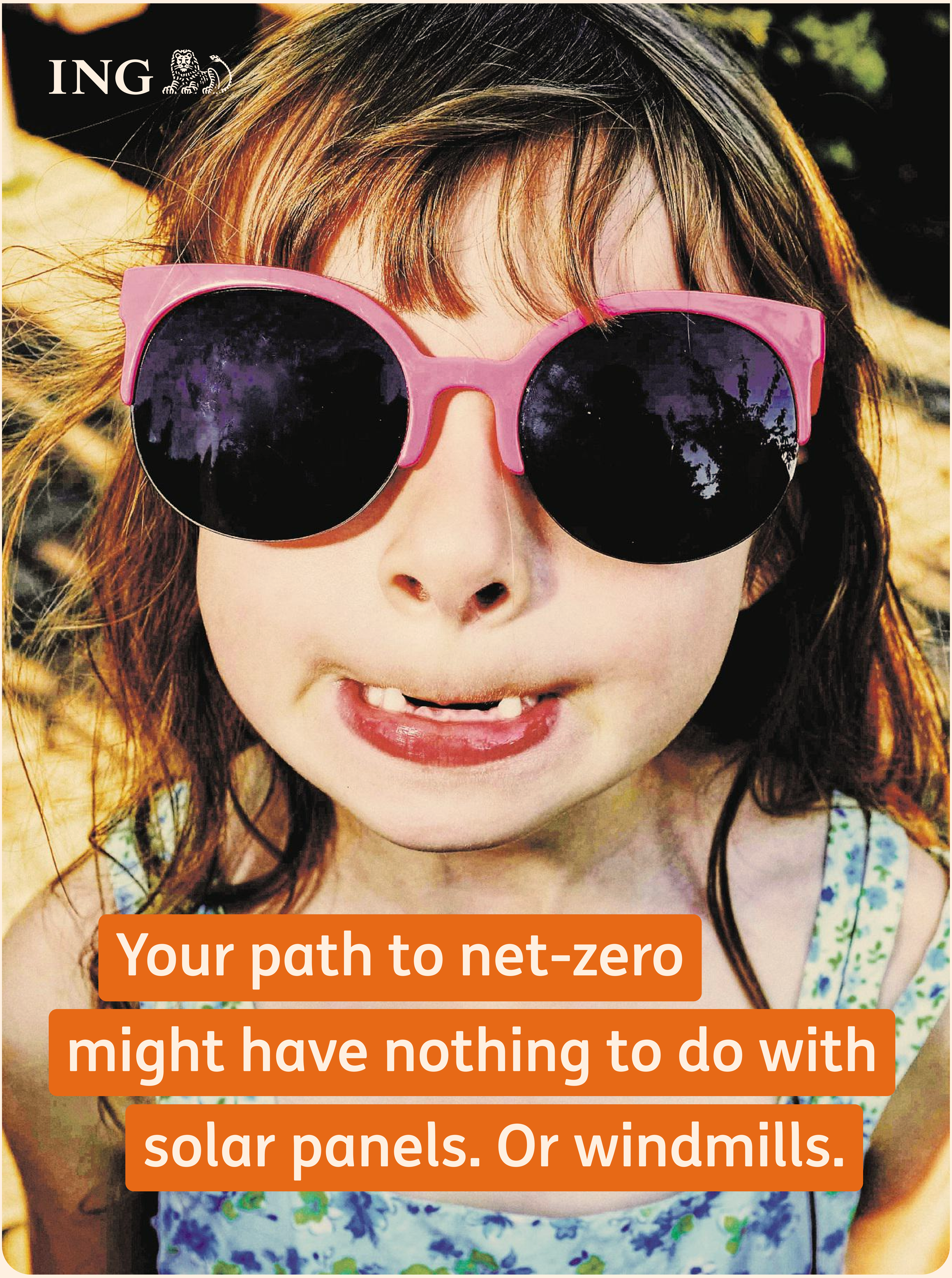
"With or without the GERD, Egypt will have to embark on major and systemic reforms in its agriculture sector, and the biggest challenge for the government will be what will happen to small farmers," said Ana Elisa Cascao, co-author of the book *The Grand Ethiopian Renaissance Dam and the Nile Basin*.

Already the government has been giving low-interest loans to small farmers to help them install modern irrigation systems and move from the traditional style of inundation. It has also been lining canals with cement to prevent seepage and introducing seed varieties more tolerant of heat and drought.

In the northern Delta, smallholders complain of declining yields and the cost of fresh soil and fertiliser to counteract salinity and the high level of underground water. "There are people who have stopped farming," said Rafiq al-Gogary, a farmer.

Fahim added that unseasonal heat had hit crops such as olives and mangoes, even wheat and vegetables. "In the past 10 years the recurrence rate of these phenomena has been increasing."

Pilita Clark see the FT View page



But it has everything to do with the future of our next generation. As a financial institution our experience in helping clients navigate this fast moving and complex area has taught us that no two journeys to net-zero will be the same.

So, if you want to speak to someone who'll commit time to your unique situation and help craft the next step on your own path to sustainability, let's talk.

find out more at ingwb.com/progress

do your thing

Keeping it local Foreign groups adopt 'China for China' strategy to draw on R&D facilities and tap growing markets ➔ COMPANIES

Companies & Markets

Gupta-owned Liberty Steel lines up deal with creditors

- Lenders set to shoulder 45% losses
- Push to avoid insolvency measures

OWEN WALKER, SYLVIA PFEIFER AND ROBERT SMITH — LONDON

Sanjeev Gupta's Liberty Steel has reached an outline deal with creditors in which they could recoup less than half of the amount they lent to the beleaguered metals group.

The deal, the details of which are still to be finalised, would allow Liberty to fend off insolvency proceedings that were due to take place this month.

Creditors would recoup a maximum of 55 per cent of what they are owed, though there is an expectation it would be significantly less than that, according to people with knowledge of the talks.

Industrialist Gupta has spent much of the past 18 months trying to fend off legal action that would dismantle his collection of global metals businesses in order to repay debts linked to the collapse of specialist finance firm Greensill Capital in March last year.

> 'We have now reached an agreement in principle that will provide recovery for the creditors'

The Financial Times has reported that loans made to Gupta's businesses from Greensill that were later sold to Credit Suisse investors were made on the basis of suspect invoices that have raised suspicions of fraud.

The UK's Serious Fraud Office and French police are investigating Gupta's GFG Alliance companies over suspected fraud and money laundering. GFG has consistently denied any wrongdoing.

UK winding-up proceedings brought by Liberty Steel creditors were set to start on November 30, having been pushed back after the two sides made progress in working out a settlement. But a judge on Monday postponed the hearing until next year to give both sides time to agree the deal.

Clients of Swiss bank Credit Suisse are owed $1.2bn by GFG Alliance, Gupta's group of metals business that borrowed money from a group of supply chain finance funds linked to Greensill. In total, Gupta borrowed $5bn from Greensill to finance the growth of a sprawling metals empire that employs thousands.

US investment bank Citigroup — acting on behalf of Credit Suisse — filed applications in London's insolvency court against some of Gupta's commodities and industrial businesses last year.

Under UK law, creditors can apply to the court to close a company that owes them money. To succeed, they must show that the company cannot pay what it owes, in which case the company's assets can be sold to repay them.

"After several months of negotiations, we have now reached an agreement in principle that will provide recovery for the creditors and will significantly deleverage and de-risk Liberty," said Jeffrey Kabel, chief transformation officer of the metals group.

The company yesterday declined to provide details of the agreement, citing confidentiality. GFG could look to raise money by selling parts of its global business, including its Australian InfraBuild group, as well as assets owned by Gupta but not part of GFG, according to people with knowledge of the talks.

Gupta's European steel assets have been hit hard by soaring energy prices after Russia's invasion of Ukraine. Liberty Steel's UK operations, focused on two plants in Yorkshire, have been operating intermittently in the past year.

Gupta was yesterday due to learn whether he had lost control of two Belgian steel plants at Flémalle and Tilleur. But the hearing at a court in Liège was postponed until November 22.

Credit Suisse declined to comment.

Wheels wobble E-scooter group Bird caught between cash squeeze and accounting error

Bird became the fastest start-up to reach a $1bn 'unicorn' valuation in 2018 — Mario Tama/Getty Images

TIM BRADSHAW

E-scooter rental pioneer Bird has warned it faces bankruptcy within the next 12 months unless it can raise more cash in a sign of a dramatic change in fortunes for one of the hottest tech sectors of recent years.

Bird became the fastest start-up to reach a $1bn "unicorn" valuation in 2018 but is fighting for survival after warning investors that it had overstated its historical revenues by tens of millions of dollars.

Bird said there was "substantial doubt about the company's ability to continue as a going concern" even after shutting operations in dozens of cities, overhauling its management team and renegotiating its debt payments in an effort to slash costs.

"We have had to adapt quickly," said Shane Torchiana, who replaced Bird founder Travis VanderZanden as chief executive in September. "We don't believe that selling $2 for $1 is a viable business strategy."

Venture capital investors have poured more than $4bn into lossmaking e-scooter rental companies in the past five years, according to investment tracker Dealroom.co, fuelled by low interest rates and a wave of hype that small electric vehicles would reshape urban transportation.

Miami-based Bird raised almost $1bn as it raced rivals such as Lime, Tier, Voi and Dott to expand around the world. But the sector has been hit by investors' waning appetite for lossmaking tech start-ups, leaving e-scooter operators starved of the capital they need for vehicles just as the seasonal winter slowdown begins.

After raising private capital from blue-chip Silicon Valley funds including Sequoia Capital, Index Ventures and Accel, Bird merged with blank-cheque company Switchback II last November at an initial valuation of $2.3bn. Its market capitalisation has since fallen by more than 90 per cent to less than $100mn.

Though revenues grew 24 per cent in the first nine months of the year to $175mn, net losses almost doubled to $322.3mn. It generated $2.2mn in cash flow in the latest quarter.

Shares in Bird fell 16 per cent on Monday and opened another 12 per cent lower yesterday, sliding to $0.32 in early New York trading. If Bird's share price does not rise above $1 by the end of the year, it faces delisting from the New York Stock Exchange.

Bird revealed on Monday that it had overstated its sales over the past two and a half years by an estimated $31.6mn after discovering that scooter rides taken by customers without enough funds in their prepaid "wallets" to pay for them were being erroneously recognised as revenue.

Bird said it would reissue its past financial statements.

Walmart lifts outlook after luring richer customers

ANDREW EDGECLIFFE-JOHNSON
NEW YORK

Walmart is gaining popularity with richer consumers looking for savings at a time of high inflation, boosting its third-quarter results even as it agreed to pay $3.1bn to states that had sued over its role in the US opioids crisis.

The cost-cutting retailer, known for its appeal to cash-strapped families, took a larger share of Americans' grocery budgets in the three months to October 31. Three-quarters of those gains came from shoppers with annual incomes of more than $100,000, executives said.

"Regardless of income levels, families are more price-conscious now," said Doug McMillon, chief executive.

Like-for-like sales in its home market grew 8.2 per cent excluding fuel over the quarter. That compares with a year-on-year increase in US consumer prices of 7.7 per cent in October, a month when inflation in food prices hit 10.9 per cent.

Walmart shares were up 7.4 per cent to $148.67 by lunchtime yesterday, boosted by news of a new $20bn share buyback plan and a better than expected 8.7 per cent increase in group revenues to $153bn.

McMillon signalled that the company was working through the excess inventory that unpredictable spending patterns had left it with earlier in the year.

The more bullish outlook came as Walmart announced it would pay $3.1bn to settle states' claims that it had contributed to the US opioids crisis by failing to regulate prescriptions of highly addictive painkillers at its stores.

Weeks after announcing negotiations on similar settlements with the pharmacy chains CVS and Walgreens, New York attorney-general Letitia James said such retailers had "played an undeniable role in perpetuating opioids' destruction". Walmart would be subject to "robust oversight" to prevent fraudulent prescriptions in future, she noted.

Unlike CVS and Walgreens, which will between them spread almost $10bn of payments over 10 to 15 years, lawyers said Walmart would pay "the vast majority" within a year.

Walmart reported a net loss of $1.77bn for the quarter, or 66 cents per share. Excluding the opioids payments and losses on equity investments, adjusted earnings were $1.50 a share, ahead of Wall Street's $1.32 a share consensus.

Additional reporting by Jamie Smyth

See Lex

UNITED STATES BANKRUPTCY COURT
SOUTHERN DISTRICT OF NEW YORK

In re: CHINA FISHERY GROUP LIMITED (CAYMAN) *et al.*, Debtors.[1]	Chapter 11 Case No. 16-11895 (JLG) (Jointly Administered)
In re: CFG Peru Investments Pte. Limited (Singapore), Debtor.	Chapter 11 Case No. 16-11914 (JLG) (Jointly Administered)

PLAN ADMINISTRATOR'S NOTICE OF OCCURRENCE OF THE EFFECTIVE DATE OF CHAPTER 11 PLAN

PLEASE TAKE NOTICE that Michael Foreman, Plan Administrator for CFG Peru Investments Pte. Limited (Singapore) in the above-captioned chapter 11 cases, by his attorneys, Skadden, Arps, Slate, Meagher & Flom LLP, hereby files this Notice of Effective Date of Chapter 11 Plan.

PLEASE TAKE FURTHER NOTICE that on June 10, 2021 this Court entered the *Order Confirming Creditor Plan Proponents' Chapter 11 Plan for CFG Peru Investments Pte. Ltd. (Singapore)* (the "Chapter 11 Plan")[2] [Docket No. 2569].

PLEASE TAKE FURTHER NOTICE that all conditions precedent to the Effective Date, including that the entities party to the UK Proceeding have consummated the UK Proceeding and the transactions contemplated thereby, have been satisfied or waived as provided in Article IX of the Chapter 11 Plan, such that the Chapter 11 Plan was substantially consummated, and the Effective Date occurred, on November 7, 2022.

Dated: November 7, 2022, New York, New York, SKADDEN, ARPS, SLATE, MEAGHER & FLOM LLP, By: /s/ Lisa Laukitis, Lisa Laukitis, Clark Xue, One Manhattan West, New York, New York 10001-8602, Telephone: (212) 735-3000, Fax: (212) 735-2000 -and- Elizabeth Downing (admitted *pro hac vice*), 500 Boylston Street, Boston, Massachusetts 02116, Telephone: (617) 573-4800, Fax: (617) 573-4870, *Counsel for Michael E. Foreman, Plan Administrator for CFG Peru Investments Pte. Limited (Singapore)*

[1] The Debtors are China Fishery Group Limited (Cayman), Pacific Andes International Holdings Limited (Bermuda), N.S. Hong Investment (BVI) Limited, South Pacific Shipping Agency Limited (BVI), China Fisheries International Limited (Samoa), CFGL (Singapore) Private Limited, Chanery Investment Inc. (BVI), Champion Maritime Limited (BVI), Growing Management Limited (BVI), Target Shipping Limited (HK), Fortress Agents Limited (BVI), Ocean Expert International Limited (BVI), Protein Trading Limited (Samoa), CFG Peru Investments Pte. Limited (Singapore), Smart Group Limited (Cayman), Super Investment Limited (Cayman), Pacific Andes Resources Development Limited (Bermuda), Nouvelle Foods International Ltd., Golden Target Pacific Limited, Pacific Andes International Holdings (BVI) Limited, Zhonggang Fisheries Limited, Admired Agents Limited, Chiksano Management Limited, Clamford Holding Limited, Excel Concept Limited, Gain Star Management Limited, Grand Success Investment (Singapore) Private Limited, Hill Cosmos International Limited, Loyal Mark Holdings Limited, Metro Island International Limited, Mission Excel International Limited, Natprop Investments Limited, Pioneer Logistics Limited, Sea Capital International Limited, Shine Bright Management Limited, Superb Choice International Limited, and Toyama Holdings Limited (BVI).
[2] Capitalized terms used herein but not defined shall have the meanings ascribed to them in the Chapter 11 Plan.

CODEL Digital Certainty
www.codelmark.com

14 Nov 2022
D9F323A263BCFB4D62D43B2DD7AEA7D2
C9D6CE60EB660DE7F4265CD27A226122

13 Nov 2022
315A3FA533B91A0AE33249A3817A7348
08D73F377DAA70CDFF701EEA178F5D44

Businesses For Sale

Business for Sale, Business Opportunities,
Business Services,
Business Wanted, Franchises
Runs Daily

Classified Business Advertising
UK: +44 20 7873 4000
Email: advertising@ft.com

Notice to Advertisers

Calls to the Financial Times Advertising Department may be monitored.

Acceptance of any advertisement for publication will be subject to the then current terms and conditions of insertion of advertisements in FT publications.

A copy of the terms and conditions of insertion of advertisements in FT publications can be obtained from +44 (0)20 7873 3000, or viewed at www.FT.com/advertising

Singapore Airlines' pregnancy rule change should set an example

INSIDE BUSINESS
ASIA

Mercedes Ruehl

In the Hollywood hit *Crazy Rich Asians*, the main character flies into Singapore's Changi airport and delights in the fact that it has a butterfly garden and a cinema. JFK airport in New York City is "just salmonella and despair", she remarks.

Changi, which opened in 1981, topped the annual Skytrax World Airport Awards for eight consecutive years before the start of the Covid-19 pandemic. And if it sets a standard for airports, then national flag carrier Singapore Airlines is the airborne embodiment of that cosmopolitan image.

This is why the enduring focus on the "Singapore Girl" — a term for female cabin crew coined in a marketing campaign 50 years ago — has been increasingly criticised by critics as outdated.

Stories abound about the airline's rules for female cabin crews. On chat rooms and blogs, current and former flight attendants offer advice to those preparing for interviews and training. Many discuss the need to stay below a certain body mass index level and detail how their make-up palette and even hairstyles are chosen for them, while others warn that candidates, who are advised to be "humble" and "elegant", may be rejected for having a mole on their face.

Singapore Airlines is not the only flag carrier to hire attractive women, of course. But many in the city-state were shocked last month to learn that, up until this year, Singapore Girls were fired when they became pregnant. In October, the airline announced it had dropped a policy that required female cabin crew to leave the airline after the first trimester of pregnancy.

The change means pregnant cabin crew also receive paid maternity leave for up to 16 weeks before being automatically added to the next flight roster, bringing Singapore Airlines in line with other local employers.

The company said cabin crew "may choose to work in a temporary ground attachment" during their pregnancy, although they would have to apply for such roles. "All eligible cabin crew who have applied for ground positions so far have been offered available positions suitable for their expertise," it said.

> 'It's possible . . . the job market is currently very tight and it makes sense to not terminate employees' contracts unnecessarily'

A director at a women's rights organisation in Singapore said: "When you put all of this together — the Singapore Girl, the fact they were one of the last global airlines to hire female pilots, the pregnancy rules — the optics are not great,"

Singapore Airlines did not provide a reason for the change. Advocacy groups suggest the airline, which laid off thousands of employees during the pandemic, is desperate to retain staff to meet the rebound in global travel. Changi is one of the world's busiest airports and a top transfer hub for Asia. Singapore Airlines this month reported a record quarterly operating profit of S$678mn ($493mn).

The Association of Women for Action and Research (Aware), a non-governmental organisation based in Singapore, said it was "surprised" that the carrier had continued the practice of forcing pregnant staff to quit for as long as it did.

"We can only speculate as to why [the airline] decided to make the change this year," it said. "It's possible that because of the pandemic the job market is currently very tight and it makes sense to not terminate employees' contracts unnecessarily."

Employees who applied for ground work had no guarantee of securing a position, Aware added. The precise grooming standards remained unclear but might also restrict opportunities for returning mothers, it said.

Maternity discrimination is against the law in Singapore, so the question arises how the government-backed airline was able to enforce the policy until 2022 despite years of criticism. It also casts a pall over state efforts to address workplace discrimination, particularly against women.

Research by Aware shows that maternity discrimination is still a widespread issue in Singapore and other employers do find ways to get around existing laws. Aware says its workplace harassment and discrimination advisory reported 71 maternity discrimination cases in 2021, out of a total of 88 discrimination cases reported to them that year.

Many hope that forthcoming anti-discrimination legislation, a first for Singapore, will be more effective in rooting out such practices by closing loopholes.

Many of the cases examined by Aware are related to small and medium-sized enterprises, not big brands such as Singapore Airlines — which is why how the carrier treats its female employees is so important. Singapore Airlines should be the sky-high bar other employers are held to, rather than a floor.

mercedes.ruehl@ft.com

This is not sustainable. We need to talk.

Sustainability is at the top of every corporate agenda. A low-carbon society requires unprecedented industrial investments. Sustainable finance plays a crucial part in how fast industries can transition their operating models.

Corporations need to shift to sustainable processes and materials. Innovations need to scale. And last but not least, we need to gradually decrease the dependency on fossil fuels at an even higher pace. There are no simple solutions, as each industry faces its own unique challenges, and only by working together will we find new ways forward.

The green transition is so important that we've made it our strategy. With advice and capital, we want to be the best financial partner possible. Through deep insights into our clients' transitions, we're using new tools and models to track how they are reducing their CO_2 footprint.

A year ago, we presented our Net Zero strategy and goals. Yesterday, we shared the first report on how we're tracking. Now we invite you to sebgroup.com/NetZeroTransition for a 30-minute summary. The green transition is such a complex topic that we have made the full 5-hour broadcast available too. Together with clients and industry experts, we explore how finance and industry can, and must, accelerate change.

Welcome!

sebgroup.com/NetZeroTransition

SEB

SEB is a leading northern European financial services group with international reach, founded in 1856. We have a presence in more than 20 countries worldwide, and count the Nordic and Baltic countries, Germany and the United Kingdom as our home markets.

Retail & consumer

Luxury industry set to defy global gloom

Research predicts €353bn sector will benefit from its ultra-wealthy client base

LAUREN INDVIK — LONDON

Shoppers are expected to splurge on luxury goods in spite of a possible global recession, boosting the €353bn sector by "at least" 3 to 8 per cent next year, according to research.

The joint forecast from analysts at Bain & Co and Altagamma comes on the back of another strong year for luxury goods, with sales up 15 per cent at constant exchange rates between 2021 and 2022 against soaring inflation and rolling Covid-19 lockdowns in China.

However, most of that growth — about 60 per cent — had been driven by price increases on handbags and other core luxury items, the report said.

Executives at top luxury companies have been cautiously upbeat on recent earnings calls, with sector leader LVMH recording a 19 per cent year-on-year sales jump in the third quarter, while Gucci owner Kering and rival Hermès both posted increases of 14 per cent.

"[An economic downturn] has not materialised into full swing yet . . . if ever it does," Jean Jacques Guiony, chief financial officer of LVMH, said in a call with investors last month.

Although luxury was not "recession-proof", it was better placed to weather financial shocks than during the 2008-09 financial crisis, said Claudia D'Arpizio, partner at Bain & Co.

That is because sales are now more concentrated among ultra-wealthy individuals whose disposable income is unlikely to be affected by an economic downturn. The top 2 per cent of spenders now accounted for 40 per cent of sales, compared with 35 per cent in 2009, D'Arpizio said.

"These customers were a big lever of resiliency, and they don't necessarily shop in stores; they are more into private events, personal shopping. Brands can work with them even when shops are closed," she said.

Positive tailwinds from the pandemic were also compensating for sinking confidence in the global economy. Covid-19 made consumers "more accustomed to a turbulent [economic] environment". Moreover, additional savings from the pandemic — to the tune of €3tn globally — had also encouraged luxury purchases as customers sought to refresh their wardrobes, D'Arpizio said. And in contrast to 2008-09, consumers were not ashamed to show off their luxury purchases.

Although the Chinese luxury market has yet to recover from the pandemic, if the country were to relax its zero-Covid policy and travel restrictions, luxury sales would probably hit the top of Bain's growth forecast of about 6 to 8 per cent next year. Last week, Beijing reduced its coronavirus quarantine requirements for close contacts and international travellers, though its zero-Covid stance remains firm.

Global luxury growth is expected to accelerate further after 2023, with Bain forecasting a sales increase of 60 per cent from 2022-30. While there will not be "another China" to drive a huge influx in spending, people becoming wealthier in regions including India, South Korea and Mexico will lead to 10mn new luxury consumers a year.

Young shoppers will also play a significant role, with Generation Z — those born between 1997 and 2012 — expected to account for about a third of luxury purchases by the end of the decade.

These young shoppers are entering the market earlier than their millennial predecessors, buying their first luxury goods at around age 15 versus 18 to 20, which Bain attributes to brands' strong digital communications strategies and the expansion of product categories, such as trainers and casual-wear, relevant to teenagers. Unlike previous generations, who tended to reject the brands favoured by their parents, young entrants like the same luxury brands as older buyers.

Covid curbs. Localisation

Foreign groups adopt 'China for China' strategy

Aim is to draw on deep R&D facilities in the country while tapping vast, growing market

THOMAS HALE AND WANG XUEQIAO
SHANGHAI

Lockdowns have led to disruption but businesses at a Shanghai fair this month said they were investing more in the country
Alex Plavevski/epa-EFE; Noel Celis/AFP/Getty

As snap lockdowns and quarantine measures disrupted China's business landscape in October, a survey of foreign companies in Shanghai showed optimism had hit its lowest level due to Beijing's coronavirus policies.

But just weeks later, at the China International Import Expo in Shanghai, one of the biggest trade fairs attended by more than half of Fortune 500 groups, a section of businesses including Kärcher, a German cleaning equipment maker, and Cytiva, a US life sciences operator, said they were investing more in China.

Rather than rely on Chinese factories to produce goods that are sold elsewhere, the businesses are adopting a "China for China" strategy, which aims to draw on deeper research & development facilities in the country to make products for a vast and growing domestic market.

Covid-19 restrictions, which make it difficult to enter and leave the country, have helped reinforce the trend.

"This year has been a tough year . . . Lockdowns are difficult for any business," said Rainer Kern, chief financial officer for China at Kärcher, a family-owned business with annual revenue of more than €3bn. "But overall, the China market has developed in the last two years.

"We want to develop more local for local production . . . We will sooner or later export, because certain trends that start here will also go into other markets, with a delay of three to five years."

China's pandemic policies and a regulatory crackdown have split investors on the country's outlook. While an American Chamber of Commerce survey showed a collapse in optimism, only a fifth of the 307 companies surveyed were decreasing investment in China compared with 2021, while 30 per cent were increasing it.

Kärcher, which exhibited a range of cleaning vehicles and yellow decontamination hazmat suits at its stand at the exhibition, plans to invest Rmb1bn ($140mn) in China in the coming years and is establishing an R&D centre in Suzhou, a city west of Shanghai, where it will have 300 staff.

Cytiva, a medical technology company, said it had invested Rmb60mn in an R&D centre in China and was "localising" production for certain products. GE HealthCare said its medical scanners, which it produces in Japan and the US, would be made in China next year.

"We consider China's biological industry a big market, and that is the main reason we are increasing investment," Cytiva said. Local production helped protect the supply chain against delays that could occur if parts were shipped in from abroad.

The comments reflect the demand that still exists in China despite its closure under Covid. They highlight an approach several groups are taking to develop their production lines in the country, so that products can be fully developed in China without the need to send parts elsewhere.

AstraZeneca, which has revenues of $6bn a year in China, said this month it would advance R&D in the country and expand its manufacturing bases. This year it opened a regional headquarters and an inhaler manufacturing facility in the northeastern city of Qingdao.

Schneider Electric, the French group that specialises in energy management, said China was one of its four largest R&D centres. It had "innovation centres" close to its factories in the country.

> 'We want to develop more local for local production'
> Rainer Kern, Kärcher CFO

The company pointed to a product for controlling energy usage it said was designed for the China market and was exported to other markets in Asia.

China's zero-Covid policies, which seek to eliminate all outbreaks of the virus through mass testing, quarantine, and frequent lockdowns, have caused big issues for foreign companies. Kärcher, for example, has a partnership with oil company Sinopec to provide car washing equipment but is unable to install new equipment because of lockdowns.

Yet Kern noted that Kärcher's robotic vacuum cleaners, which are used at Shanghai's Hongqiao railway station, demonstrated the importance of maintaining a China presence because AI tech developed in the country was far ahead of the competition.

He said: "China is very much [about] speed. This is why we also do this R&D. Because if we first talk to Germany to develop things, it takes too long."

Technology

Alphabet faces pressure from activist fund to cut headcount and salaries

RICHARD WATERS AND TABBY KINDER
SAN FRANCISCO

Google's parent Alphabet faced a call from a large shareholder yesterday to cut its soaring headcount and slash high salaries paid to non-engineers, in the latest sign of the pressure building on the biggest US tech companies to overhaul their business for an era of slower growth.

TCI, a hedge fund that said it owned around $6bn of Alphabet's shares, called for "aggressive action", including a cutback in Google's long-running investment in driverless cars and a big increase in share buybacks.

The hedge fund's call, in a letter to chief executive Sundar Pichai, came the day after reports that Amazon was preparing to cut about 10,000 jobs, or 3 per cent of the total. Meta, parent of Facebook, disclosed plans for a more swingeing 13 per cent cut last week as it deals with falling advertising revenue and the costs of building the metaverse.

TCI had earlier approached Alphabet's management about its concerns.

"All of Silicon Valley has seen similar problems of having over-hired and overcompensated people, and they are taking action," said TCI head Chris Hohn. "This is a broad theme across the major tech companies that need to attack costs. But Alphabet is doing the opposite."

> TCI wants a cutback in the long-running driverless cars investment and a big increase in stock buybacks

The rapid pace of hiring at the Google internet business, which accounts for more than 99 per cent Alphabet's revenue, has long been a source of unhappiness on Wall Street, though the concern has increased this year as growth has slowed and hiring has accelerated. Alphabet added more than 36,000 workers in the past 12 months, lifting its headcount by nearly a quarter, even as advertising revenue slowed sharply.

Pointing to the high growth Alphabet reported in the run-up to, and during, the pandemic, TCI said cost discipline had not been a "priority" until last year. But it complained that the latest hiring binge had driven the company's operating profit margin down from 39 per cent last year to 32 per cent in the latest quarter, and that Alphabet's median salary, at nearly $300,000, was two-thirds higher than Microsoft's.

Pichai wrote to staff in July calling for "greater urgency, sharper focus and more hunger" as the economic outlook became more uncertain. He said Alphabet's hiring would slow.

Google founders Sergey Brin and Larry Page control 51 per cent of the votes in Alphabet through a special class of voting shares, despite owning less than 12 per cent of the equity.

Hohn said he would not consider a proxy fight against the Alphabet board because of the founders' control, but he believed Brin and Page would take action to cut costs.

Hohn called on Alphabet to cut back its spending on its moonshot projects. Much of the $20bn lost in the last five years on what Alphabet calls its "other bets" had been spent on driverless car unit Waymo, he said.

The TCI letter to Alphabet was first reported by the Wall Street Journal.

Financials

Credit Suisse offloads SPG assets to Apollo

WILLIAM LANGLEY — HONG KONG
OWEN WALKER — LONDON

Credit Suisse confirmed yesterday that it was selling much of its securitised products group to private equity group Apollo, as the bank slashes a business that generated substantial profits but ate up large amounts of capital.

Credit Suisse last month announced a restructuring plan including carving up and spinning off its investment bank, cutting thousands of jobs and raising $4bn in capital, to help it move on from scandals and a SFr4bn ($4.2bn) third-quarter loss.

It was the bank's second strategic revamp announcement in less than 12 months, this time under the leadership of chief executive Ulrich Körner and chair Axel Lehmann, who have been brought in to cut costs and refocus the business on wealth management.

The changes will result in 9,000 jobs being cut from Credit Suisse's 52,000 global workforce over the next three years. The bank has attracted investment from the Saudi National Bank to help pay for the restructuring.

The New York-based securitised products business packages debts, such as mortgages and loans for yachts, before selling them on as securities.

> The bank's securitised products group packages debts before selling them on as securities

The sale, which includes other related businesses, will reduce the bank's capital burdens but also do away with one of its most profitable businesses.

Credit Suisse yesterday said Apollo had agreed to acquire a "significant part" of the assets of its securitised products business, reducing its holdings of such assets from $75bn to $20bn.

The transactions, which it expected to complete by mid-2023, would achieve a release of risk-weighted assets of up to $10bn and improve the bank's common equity tier one ratio. Apollo is expected to hire most of the securitised products team, which is led by Jay Kim.

Credit Suisse did not announce a price for the deal in its statement.

"We lack important financial details for an assessment of the transactions," said Andreas Venditti, an analyst at Vontobel. "Some of the details do not seem to have been finalised yet."

The bank's board and management decided the unit required too much capital and had little overlap with its private wealth business, which will become the bank's core focus.

Credit Suisse previously announced it had entered into an exclusivity agreement with an investor group led by Apollo that also included US bond manager Pimco to transfer a significant portion of its securitised products group.

Telecoms

Vodafone held back by weak German showing

ANNA GROSS — LONDON

Vodafone lowered its outlook for the full year as the telecoms group's profits slipped in the first half, driven by a weak performance in its largest market, Germany.

Shares in the UK operator dropped 7.9 per cent yesterday after the company adjusted its earnings guidance to €15bn to €15.2bn, down from €15bn to €15.5bn, and lowered its free cash flow forecast from €5.3bn to €5.1bn.

Vodafone posted revenue up 2 per cent to €22.9bn but adjusted earnings before interest, tax, depreciation and amortisation down 2.5 per cent to €7.2bn, below consensus estimates of €7.5bn.

In Germany, which accounts for 30 per cent of group revenue, adjusted ebitda fell 7.4 per cent to €2.68bn, in part due to losses in broadband customers and higher customer acquisition costs.

"In the context of a challenging macroeconomic environment, we are delivering a resilient performance this year," Vodafone's chief executive, Nick Read, said in a statement.

Read said the company was taking steps to mitigate high energy costs and inflation such as supporting vulnerable customers, taking pricing action in Europe, and implementing energy efficiency measures across the business.

The group announced a new cost saving target of €1bn by 2026. It also posted a weak performance in its Italian businesses, with adjusted ebitda falling 17.3 per cent to €759mn.

Higher customer acquisition costs and broadband losses hit earnings

This April, Vodafone increased prices in line with the annual consumer price index, plus 3.9 per cent, which has helped bolster returns in its UK division and offset a weaker performance in some of its other key markets.

The UK business reported a more than 7 per cent rise in revenues, to €3.4bn, and adjusted ebitda, to €685mn.

Read has been looking to shake up the structure of the company since late last year, pursuing deals in some of the more competitive European markets, including Spain, Italy, the UK and Portugal.

Last week, Vodafone announced it had agreed to sell up to 50 per cent of its €14.8bn mobile phone masts business to a private equity consortium, which would allow it to reduce its debt and potentially pursue deals.

COMPANIES & MARKETS

EY faces tax authority lawsuit over work for property investor

HMRC claims that adviser made misrepresentations when negotiating settlement for Ritblat's firm

KADHIM SHUBBER, MARY MCDOUGALL AND MICHAEL O'DWYER — LONDON

The UK's tax authority is suing EY over alleged misrepresentations made during the negotiation of a tax settlement relating to British property investor and Conservative party donor Jamie Ritblat.

The lawsuit is linked to a broader dispute between HM Revenue & Customs and Ritblat about whether the 2015 settlement of just £400 should block further taxes on £141mn of profits paid out after the deal was struck.

HMRC's action against EY, which negotiated the settlement, is a highly unusual instance of the UK government targeting a big tax adviser in addition to its wealthy clients, according to tax experts.

"This is quite extraordinary and I've never seen anything like it," said Dan Neidle, former head of tax at Clifford Chance, the law firm, and founder of Tax Policy Associates.

The dispute between HMRC and Ritblat, an investor in several large London redevelopment projects through his Delancey investment firm, now spans four tracks of litigation in what is set to be years of complex and expensive legal wrangling.

Ritblat has sued HMRC in the High Court. The tax authority has in turn brought a High Court lawsuit against Delancey. There are proceedings in the tax tribunal relating to Ritblat's personal tax returns. Now HMRC is also suing EY.

The previously unreported claim against EY was issued in July but HMRC has yet to serve it on the firm. The High Court heard last week that HMRC intends to serve the case before a November 28 deadline.

The HMRC claim is the latest UK legal action against EY. It is already defending a $2.7bn High Court negligence claim by the administrators of former FTSE 100 audit client NMC Health, which collapsed in 2020 after one of the biggest frauds ever alleged at a UK-listed company.

EY's clients include many of the UK's largest companies, and its tax advisers were paid £934mn by clients in the 12 months to June. "Acting with professional integrity" is one of the five principles of the firm's global code of conduct.

The Ritblat dispute centres on an employee benefit trust set up in 2007 as he raised €1.5bn for Delancey's flagship DV4 Limited client fund. The DV4 fund's portfolio today includes the Earl's Court redevelopment and the former Olympic Athletes' Village in Stratford, east London. Delancey has donated £350,000 to the Conservatives since 2011.

Employee benefit trusts became controversial as historically some were used as tax avoidance vehicles. Assets could be allocated to employees who could defer paying income and other taxes until a later date when they received a distribution.

The DV4 trust was created to hold the profits due to Delancey employees including Ritblat for earning a return for their investors. Such profits are known as carried interest.

The DV4 fund's portfolio today includes the former Olympic athletes' village in Stratford, east London. Below, Jamie Ritblat — Richard Baker/In Pictures/Getty

In 2008, the nadir of the property downturn that accompanied the financial crisis that year, the DV4 trust made allocations to its Delancey employee beneficiaries that were valued at a total of about £1,000. No carried interest had yet been accumulated.

By the time of HMRC's 2015 settlement talks with Delancey and a fund services company, the value of the carried interest in the trust had surged to £125mn. In those negotiations, however, EY did not disclose the current value. A £400 settlement was agreed on the basis of the £1,000 value of the allocation in 2008.

The talks had been part of a wider scheme by HMRC to resolve historic issues relating to employee benefit trusts. EY negotiated more than 100 agreements for trusts related to other companies as part of that settlement scheme and helped HMRC draft an information sheet about its EBT resolutions programme.

"Misrepresentations were made to us in 2015," said HMRC. "Clearly, had appropriate disclosures been made, the settlement would not have been entered into. It is our duty to ensure everyone pays the right tax under the law, regardless of wealth or status."

Ritblat and Delancey argued in a September court filing that the legally relevant question was the value of the trust at the time of the allocation, not at the time of the settlement. No representations were made about the 2015 value, they said.

> 'It is our duty to ensure everyone pays the right tax . . . regardless of wealth or status'

> 'We strongly refute any suggestion of wrongdoing by EY and will vigorously defend the claim'

"There can be no credible argument that the position was misrepresented to HMRC," they wrote, adding: "Had HMRC considered the 2015 value of the DV4 Trust's assets to be a relevant matter, it could and would have required that information to be provided."

EY said: "While it would be inappropriate to comment on ongoing legal proceedings, we strongly refute any suggestion of wrongdoing by EY and will vigorously defend the claim against us."

The dispute is set to rumble on for years. The High Court heard last week that the lawsuit brought by Ritblat against HMRC would not go to trial until at least April 2024. The case brought by HMRC against Delancey has been stayed pending the main litigation.

It is not yet clear if the EY proceedings will be similarly stayed or heard alongside Ritblat's case. The case against EY includes allegations of misrepresentation and an assumption of responsibility argument, the court heard. EY might move to strike out the case against it.

Ritblat has asked the High Court to declare that HMRC is precluded by the 2015 deal from seeking taxes on what HMRC has said was some £141mn of distributions made by the trust after the settlement was agreed. The court heard there had been efforts to settle the dispute that had not been successful.

Energy

Tech tycoon wins board seats in AGL coal clash

NIC FILDES — SYDNEY

Investors in Australia's largest-polluting company have rebelled against its management by electing four new board members proposed by minority shareholder and software billionaire Mike Cannon-Brookes.

The billionaire's nominees — including former Foster's chief executive John Pollaers and former Tesla Energy director Mark Twidell — will now hold four of energy company AGL's nine seats.

The board, led by chair Patricia McKenzie, had opposed three of the four nominees being elected but shareholders overwhelmingly backed Cannon-Brookes, whose Grok Ventures owns more than 11 per cent of shares.

The success of Cannon-Brookes' activist campaign reflects frustration at AGL's performance — its shares have fallen by about 70 per cent in the past five years — but also agitation with the country's energy sector, which remains reliant on coal.

That slow transition has attracted private equity bidders. Origin, a rival to AGL, agreed to a potential $12bn takeover from Brookfield and EIG Partners this month.

AGL, one of Australia's oldest companies and its largest energy business, has been locked in a battle with Cannon-Brookes, a co-founder of software developer Atlassian, for most of the year. He joined forces with Brookfield to bid for the business in February and planned to use AGL's balance sheet and large customer base to accelerate its transition to renewable energy.

The bid attempt failed — and Brookfield moved on to Origin — but the billionaire bought a minority stake in AGL and successfully derailed a long-planned demerger of its coal-fired plants after shareholders backed his opposition to the plan in May.

That triggered the exit of AGL's top management and a battle between McKenzie and the billionaire for control, including the appointment of new board members and a chief executive to lead a new transition plan.

Kerry Schott, a former Sydney Water and Deutsche Bank executive, and Christine Holman, a former Telstra executive, will also join the board after the shareholder vote, which was held at a recital hall in Melbourne yesterday.

Grok said the election of its nominees represented a "desire for change" from the energy company's shareholders.

McKenzie told the annual meeting she expected the new board to continue to work towards its plan to turn off coal-fired power stations by 2035.

Brynn O'Brien, executive director of the Australasian Centre for Corporate Responsibility, said the vote was a victory for shareholders but also a "scathing indictment on those who spent years destroying shareholder value by delaying the inevitable in the face of an escalating energy transition".

AGL's shares have risen 14 per cent in the past month in the lead-up to the vote and on the back of the Origin bid. Meanwhile, Atlassian, which is listed on Nasdaq, declined by almost a quarter earlier this month after disappointing first-quarter growth. The stock is down 62 per cent since the start of the year.

Financials

Nigeria start-up among investors mauled as FTX woes spread

AANU ADEOYE — LAGOS

Nestcoin, a Nigerian start-up, held funds raised from investors on FTX and plans to cut a large proportion of its staff as the failure of Sam Bankman-Fried's crypto exchange cascades around the world.

The group held a "significant" portion of the stablecoin investment that it used for day-to-day operations on FTX ahead of the exchange's bankruptcy filing on Friday, Nestcoin said in a letter to investors.

An investor in crypto, gaming and digital art, Nestcoin raised $6.45mn in an early funding round with backers that included Alameda Research, Bankman-Fried's trading shop. The amount was the largest raised by a Nigerian start-up at such an early stage.

It held about $4mn on FTX, which represents nearly all the remaining funds that it had raised, according to an investor who had been briefed by the company.

The group declined to comment but the investor letter said Nestcoin did not yet hold any client assets.

The issues at Nestcoin are the latest sign of the broad scale of the damage caused by the crisis at FTX, which was valued at $32bn and seen as one of the most regulation-friendly companies in an industry described by Wall Street's top regulator as the "wild west".

Nestcoin would cut at least half of its almost 100-strong staff as a result of FTX's plight, according to current and former employees.

Other employees are being offered a furlough scheme lasting eight to 10 weeks and will be paid on a per-needed basis. Those employees left will take a pay cut of about 40 per cent while chief executive Yele Bademosi will receive no compensation.

Nestcoin sought to assure its investors that customer finances were safe, saying in the investor update that the products it had released "are DeFi protocols & non-custodial in nature and, as such, we have never held customer funds and this incident has no impact on our customers financially".

FTX and Alameda Research invested in other African start-ups over the past year. Chipper Cash, a Kenya-based remittance company, raised $150mn last year at a $2bn valuation led by FTX and unnamed investors.

Mara, another Kenyan crypto start-up, raised $23mn from Alameda, Coinbase and others. Mara said in May that it would become the "official crypto partner" of the Central African Republic, which adopted Bitcoin as legal tender this year. In August, the country's top court declared unconstitutional most of the schemes being run under the bitcoin programme, including the purchase of citizenship.

The job cuts at Nestcoin are the latest sign of the broad scale of the damage caused by the crisis at cryptocurrency exchange FTX Ángel García/Bloomberg

An investor in African start-ups said FTX's value proposition to these start-ups was its name. "It's all part of the crypto religion," the investor said. "A brand like FTX on the [list of investors] made it look like you'd been anointed. I mean, this guy was on the cover of Forbes."

The investor said the start-ups that raised equity from Alameda "almost certainly" held some of their assets with FTX like Nestcoin.

Nestcoin said in its investor update that Alameda's holding represented less than 1 per cent of equity in the group.

Nestcoin bills itself as a company that was "democratising access to economic opportunity for everyday people in frontier markets". The company has holdings including Breach, a media outlet that it hoped would help people understand and adopt crypto, and MVM, a crypto gaming community.

Bademosi was previously an executive at Binance's venture capital unit.

Nestcoin invested in other African crypto start-ups, such as LazerPay, which processes crypto payments.

Contracts & Tenders

HELLENIC REPUBLIC ASSET DEVELOPMENT FUND

INVESTING IN DEVELOPMENT

INVITATION FOR EXPRESSIONS OF INTEREST FOR THE ACQUISITION OF A MAJORITY STAKE IN THE SHARE CAPITAL OF VOLOS PORT AUTHORITY S.A.

Athens, 7th November 2022

Notice Number in the OJ S: 2022/S 214-615784
Notice Number in KIMDIS: 22PROC011553065
Tender Number in KIMDIS: 22PROC011555918

The Hellenic Republic Asset Development Fund (the **"Fund"**) launches an international tender process for the sale of shares (the **"Shares"**) corresponding to a majority stake of at least 67% in the share capital of Volos Port Authority S.A. (the **"Company"**) (the **"Transaction"**).

The Company has concluded with the Hellenic Republic a concession agreement dated 19.11.2002 (the **"Concession Agreement"**), which was ratified by article 1 of law 4597/2019 by virtue of which the Company was granted the right to exclusively use and operate the buildings, land and facilities of the port land-side zone of the port of Volos. The Concession Agreement expires on November 19th, 2062.

The Fund and the preferred investor to be selected in accordance with the tender process to whom the Transaction will be awarded would enter into a share purchase agreement for the transfer of the Shares and a shareholders' agreement with respect to the Company. In addition, within the context of the tender process, it is envisaged that the Concession Agreement will be renegotiated and amended.

The tender process will be carried out in two phases (Phase A and B). During Phase A, the interested parties will be requested to express their interest by submitting a written expression of interest on Friday, January 20th, 2022 and by no later than 15:00 p.m. (Greek time) at the Fund's premises, 1 Karagiorgi Servias 6 Str, 105 62, Athens, Greece and demonstrate that they fulfill the prequalification criteria as outlined in detail in the relevant invitation (the **"Invitation"**), available on www.hradf.com. Those interested parties that fulfill such prequalification criteria will be shortlisted and invited to participate in Phase B, during which they will submit binding offers for the Transaction.

In this respect, the Fund invites expressions of interest for the Transaction from interested parties. Interested parties should review the Invitation, which provides details of the Transaction as well as information regarding the prequalification criteria and the conditions for participation in the tender process and express their interest in writing according to the instructions provided therein.

ADVISERS TO HRADF

Deloitte Business Solutions S.A. - Eurocosultants S.A.
PotamitisVekris Law Firm
Doxiadis Associates S.A

Fixed income. Gilt yields

Investors warn UK against fresh round of austerity

Fiscally hawkish: Prime Minister Rishi Sunak said financial markets would punish the UK without sufficient tax rises and spending cuts
Dan Kitwood/Getty

Chancellor must tackle public finances without prolonging recession, say fund managers

GEORGE STEER AND TOMMY STUBBINGTON — LONDON

The UK government risks learning the wrong lessons from former prime minister Liz Truss's calamitous "mini" Budget and prolonging a recession if cuts to public spending go too far, asset managers have warned ahead of this week's autumn statement.

Chancellor Jeremy Hunt is expected to announce tax increases and sweeping cuts to public services tomorrow as he attempts to plug a so-called "fiscal black hole" in the public finances and prove that the UK is a "country that pays our way".

The announcement will come barely two months after Truss's package of unfunded tax cuts sent UK bond yields soaring and sterling down to an all-time low against the US dollar.

Prime Minister Rishi Sunak warned this week that financial markets would punish the UK if his government failed to deliver large enough tax rises and spending cuts.

But investors said that, while the abandonment of Truss's borrowing plans has been critical in restoring calm to markets, they are not clamouring for a new wave of austerity — arguing that a bigger danger could come from tightening fiscal policy too rapidly and piling further pressure on an economy already sliding into recession.

"They have to be careful on how tight a Budget they put forward," said Sandra Holdsworth, UK head of rates at Aegon Asset Management. "They don't want to completely stuff the economy."

UK borrowing costs have receded from recent highs
10-year gilt yield (%)

Source: Refinitiv

Amanda Rosenberg, head of geopolitics at Amundi Institute, said the Conservative party's desire to rebuild its reputation for fiscal responsibility meant that Hunt and Sunak risked going "beyond what is necessary" in their autumn statement.

Some fund managers take issue with the notion that the gilt sell-off that followed Truss's ill-fated Budget was mostly a response to the scale of extra borrowing it entailed.

The drop in gilt yields in recent weeks suggests that markets will be more tolerant of Sunak's borrowing than they were of Truss's plans, which alarmed investors partly because they were not accompanied by an OBR forecast on the path of the public finances.

UK 10-year bond yields fell to 3.29 per cent yesterday, down from 4.5 per cent in late September.

"Bond markets didn't hate the Truss mini-Budget because they wanted austerity," said a fixed income fund manager at a large UK asset manager, adding that there was little evidence that tax cuts for higher earners would have helped to boost growth. "Austerity isn't going to solve many of the UK's problems — the NHS is facing a hugely difficult winter and the growing number of economically inactive workers who are long-term sick is starting to show in the data and is exacerbating tightness in the labour market."

The September mini-Budget "was so ill-conceived and tone deaf that [the market reaction] was more idiosyncratic to her so-called plan than a larger referendum on the UK fiscal outlook", said Gregory Peters, co-chief investment officer at PGIM fixed income.

"I do wonder if taking a fiscally hawkish stance in a time of looming economic weakness is appropriate," he added.

Sunak's push for savings was born of a gloomy set of forecasts from the Office for Budget Responsibility, which has told the Treasury that it faces a deficit of close to £100bn in 2026-27, up from a March forecast of £31.6bn.

The roughly £70bn gap has been described as a "black hole" by government ministers in the run-up to tomorrow's statement.

'They have to be careful. They don't want to completely stuff the economy'

Yet those estimates were made by a "very, very conservative OBR", said one bond investor based in the UK, who estimated that the black hole could be as small as £20bn now that gilt yields and gas prices were declining.

Even so, any sign of fiscal excess would damage Hunt and Sunak's credibility in the eyes of investors "irritated" by Truss's policies, the investor added. "They're presenting themselves as process, stability candidates. If you're process and stability candidates, you have to play by the rules."

Reports of how much the government needs to save are "on the high side", said HSBC economist Liz Martins. "Expectations may be being managed."

In the short term, markets are not expecting Sunak's change of tack to shave much off the government's borrowing plans.

The Debt Management Office raised its gilt sales target for the current financial year by more than £60bn to £194bn at the time of Truss's budget.

Any reduction alongside tomorrow's statement is likely to be "minimal", according to Martins.

Still, the former prime minister's fate suggests markets will continue to apply greater scrutiny to fiscal plans in the UK and beyond — particularly against a backdrop of high inflation and rising interest rates.

"Governments are going to be held more accountable to deficit spending," said Jim Caron, a portfolio manager at Morgan Stanley Investment Management. "It doesn't mean they have to go overboard on being austere but they better have good, well thought out reasons for deficit spending. That said, some austerity is warranted."

See Markets Insight

FT
Our global team gives you market-moving news and views, 24 hours a day
ft.com/markets

Currencies

Yen rebounds from 32-year lows on Fed rate hopes

LEO LEWIS AND KANA INAGAKI — TOKYO

Japan's yen has powered back from 32-year lows on talk that the US central bank will slow its rate increases, stirring hopes among some analysts that a period of weakness is coming to an end.

In the past three weeks, the yen has risen from ¥151.94 against the dollar to about ¥139 with most of those moves taking place during US market hours as investors scrutinise signals from the Federal Reserve that it could slow the pace of future rate rises.

The yen's sharp fall in recent months has caused alarm in Japan as rising bills for imports and food caused the economy to contract in the July to September quarter, the first time in a year.

The government recently announced a $200bn spending package to ease the impact on households of surging living costs.

But foreign exchange analysts and economists said that, despite significant efforts by Japanese authorities to support the yen — with intervention worth about ¥9tn ($64bn) since September — the currency's fate was still dictated by the Fed and the dollar.

Takahide Kiuchi, executive economist at Nomura Research Institute, said it would be premature to declare an end to the strong dollar trend until the Fed begins a shift down from 0.75 percentage point rises, which the US central bank has implemented at every meeting since June.

'I think we are entering the final phase or chapter of the historic weakening of the yen'

A cooler than expected US inflation reading for October has helped stoke some optimism the Fed will begin slowing the pace of monetary policy tightening.

Kiuchi, a former Bank of Japan board member, said a turning point for the yen was close.

"I think we are entering the final phase or chapter of the historic weakening of the yen," he said. "This is the start of an end to the weaker yen."

Yujiro Goto, chief foreign exchange strategist at Nomura Securities, said that, despite what appeared to be a definitive recovery by the yen in recent days, investors remained nervous about calling a definitive end to the selling.

Over the coming weeks, ahead of the Fed's meeting in mid-December, it was possible the yen could slide back towards ¥145 to the dollar, said Goto, though the likelihood that it would fall back below ¥150 was now diminished.

"In addition, I think that current account balance is recovering because of the reopening of the border and the return of tourists and the oil price also seems to have peaked, so it looks like the largest yen selling is likely behind us," said Goto.

Equities

China stocks extend gains after Biden and Xi meet ahead of G20 summit

WILLIAM LANGLEY — HONG KONG

Chinese equities extended a rally yesterday after Joe Biden and Xi Jinping signalled a desire to improve US-China relations in a meeting ahead of the G20 summit.

Investors also embraced signs that Beijing was partially relaxing some of its pandemic policies and offering support to the property sector, even as China released data showing slower factory output growth and a fall in retail sales last month.

Hong Kong's Hang Seng index added as much as 4.2 per cent while the CSI 300 index of Shanghai and Shenzhen stocks gained 2.1 per cent.

Elsewhere in Asia, Tokyo's Topix rose 0.4 per cent and Seoul's Kospi index was flat.

The Hang Seng Tech index rose as much as 7.8 per cent with internet groups Alibaba and Tencent up about 11 per cent and 10 per cent, respectively.

Investors were discouraged last month when Xi appointed loyalists to top leadership positions and pledged to stick with strict coronavirus policies at the Communist party congress.

On Monday, Biden and Xi used their first in-person meeting as leaders to sound a more constructive note on relations after ties between the two superpowers plunged to a multi-decade low.

In addition, recent moves by the Chinese government to slightly ease some pandemic curbs and offer support to the property sector have buoyed hopes that the world's second-largest economy will start to emerge from a prolonged slowdown.

A jump for Tencent helped boost Hong Kong's Hang Seng Tech index

"While our long-term concerns on China remain in place, we turn tactically constructive on China equities," Bank of America analysts wrote in a note.

Jefferies analysts commented: "There is a faint whiff of panic as the authorities roll out further policies to relax Covid restrictions and an easing in financial conditions for the real estate sector and SMEs."

They added: "The single biggest winners from the authorities' U-turn are the consumer stocks," noting that policy was being eased ahead of Chinese new year, the country's biggest holiday, which falls on January 22 next year.

Analysts warned, however, that growth would remain subdued.

"China's near-term cyclical rebound is a positive, yet we don't see valuations compelling enough to turn overweight," analysts from BlackRock Investment Institute said, adding that they were now neutral on Chinese equities.

"Activity is restarting but we see 2022 growth below official targets," they said.

Commodities

Diesel price surge risks worsening European energy crisis, IEA warns

TOM WILSON

Diesel may be the next pain point in Europe's energy crisis with EU sanctions on Russian exports set to increase competition in an already "exceptionally tight" market, the International Energy Agency warned.

Prices for diesel and the relative difference to the price of crude surged to record levels last month and are 70 per cent and 425 per cent higher, respectively, than a year ago, according to the IEA.

"High diesel prices are fuelling inflation, adding pressure on the global economy and world oil demand," said the Paris-based body.

Once an EU embargo on imports of diesel and other refined products from Russia is implemented in February, the market will tighten further, it added.

"The competition for non-Russian diesel barrels will be fierce with EU countries having to bid cargoes from the US, Middle East and India away from their traditional buyers," it said. "Increased refinery capacity will eventually help ease diesel tensions. However, until then, if prices go too high, further demand destruction may be inevitable for the market imbalances to clear."

Upward pressure on prices for diesel — a workhorse fuel that is key for economic growth — has been growing for much of the year.

Diesel markets were already stretched before Russia's invasion of Ukraine because of the closure of 3.5mn barrels a day of refinery capacity since the start of the Covid-19 pandemic, the IEA said.

'Further demand destruction may be inevitable for the market imbalances to clear'

The disruption of Russian shipments and lower than normal Chinese exports have further crimped supply just as demand for the fuel revived after the easing of pandemic restrictions in most of the world.

Global supply problems have been exacerbated in recent months by industrial action at European refineries.

Walkouts over pay at several French refineries led to fuel shortages across northern France in October and at one point helped to propel diesel prices in the main European trading hub of Rotterdam to more than $80 higher than the price of crude oil, the IEA said.

With the cost of living rising, further industrial action is expected. Workers at ExxonMobil's 270,000 b/d Fawley plant in the UK have announced a walkout for late November while workers at BP's 380,000 b/d Rotterdam facility have also threatened to strike.

High diesel prices combined with a weak Chinese economy, Europe's energy crisis and a strong US dollar were already "weighing heavily" on consumption, according to the IEA.

Global oil demand is forecast to fall by 240,000 barrels a day in the fourth quarter compared with last year, it said.

EU countries by October had already cut crude imports from Russia by 1.1mn b/d and diesel imports by 50,000 b/d.

While Russia has managed to redirect all crude shipments rejected by Europe so far, it has been forced to cut exports of refined products by 400,000 b/d since the start of the year, the IEA said.

The day in the markets

What you need to know

- **Wall Street stocks gain after inflation data spark hopes of smaller rate rises**
- **US producer prices increase less than expected in October**
- **European equities edge higher while Xi-Biden talks boost Asian indices**

Dollar under pressure as risk-on sentiment returns

US Dollar index

Source: Refinitiv

Wall Street stocks rallied and the dollar weakened yesterday as new signs that inflation cooled last month boosted hopes that the US Federal Reserve would slow the pace of its rate increases.

The benchmark S&P 500 climbed 1.3 per cent in morning trade in New York while the tech-heavy Nasdaq Composite soared 2.3 per cent.

The S&P 500 has gained more than 11 per cent from its intraday low in October.

Yesterday's gains followed a report that showed US producer prices rose 0.2 per cent in October from September, compared with expectations of 0.4 per cent in a Bloomberg poll.

The annual rate of wholesale inflation came in at 8 per cent, down sharply from 8.5 per cent in September.

"This data is further confirmation of the peak for now in inflation, evidence that we've been seeing for months," said Peter Boockvar, chief investment officer at Bleakley Financial Group.

The slowdown in the rate of increase in factory gate prices comes after data last week showed US consumer inflation was also easing, building hopes among some investors that the Fed would slow its tightening of monetary policy, which has lifted the dollar and weighed on stocks.

The US Dollar index, which tracks the currency against six others, fell 0.2 per cent, trimming losses earlier in the day but continuing a decline since its September peak. The euro, pound and yen all increased against the US currency.

US government bonds rallied — the yield on two-year US Treasuries slipped 2 basis points to 4.38 per cent.

The yield on the benchmark 10-year US note fell 4bp to 3.82 per cent.

Some analysts said investors had become unjustifiably optimistic on the recent gains on Wall Street, however.

"S&P 500 daily returns of more than 2 per cent tend to be more frequent during bear markets," said analysts at Goldman Sachs, who believed that the recent rally in bonds and risky assets was "likely overdone".

"The larger than expected inflation reset might support a slowdown in the hiking pace but risks of a hike cycle extension remain," the bank added.

Across the Atlantic, the pan-regional Stoxx Europe 600 added 0.3 per cent while London's FTSE fell 0.2 per cent.

Asian markets made strong gains after Xi Jinping and Joe Biden signalled a desire to improve US-China ties at a meeting ahead of the G20 summit in Indonesia while Beijing moved to ease some pandemic curbs. **George Steer**

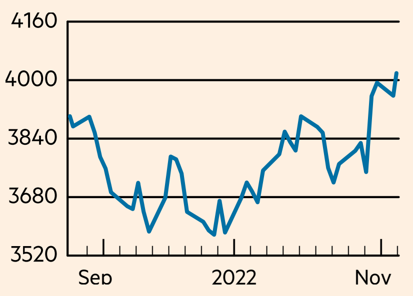
Markets update

	US	Eurozone	Japan	UK	China	Brazil
Stocks	**S&P 500**	**Eurofirst 300**	**Nikkei 225**	**FTSE100**	**Shanghai Comp**	**Bovespa**
Level	4019.20	1712.20	27990.17	7369.44	3134.08	113161.28
% change on day	1.57	0.37	0.10	-0.21	1.64	0.81
Currency	**$ index (DXY)**	**$ per €**	**Yen per $**	**$ per £**	**Rmb per $**	**Real per $**
Level	106.203	1.037	139.240	1.190	7.034	5.325
% change on day	-0.428	0.387	-0.837	1.449	-0.073	0.133
Govt. bonds	**10-year Treasury**	**10-year Bund**	**10-year JGB**	**10-year Gilt**	**10-year bond**	**10-year bond**
Yield	3.810	2.105	0.239	3.288	2.811	12.459
Basis point change on day	-6.370	-4.000	0.120	-7.300	-1.900	-17.200
World index, Commods	**FTSE All-World**	**Oil - Brent**	**Oil - WTI**	**Gold**	**Silver**	**Metals (LMEX)**
Level	411.48	93.27	86.12	1768.90	21.47	3984.00
% change on day	1.47	0.14	0.29	0.54	-0.05	0.38

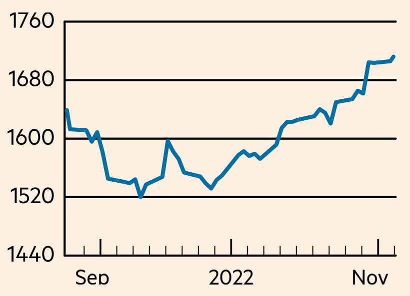
Yesterday's close apart from: Currencies = 16:00 GMT; S&P, Bovespa, All World, Oil = 17:00 GMT; Gold, Silver = London pm fix. Bond data supplied by Tullett Prebon.

Main equity markets

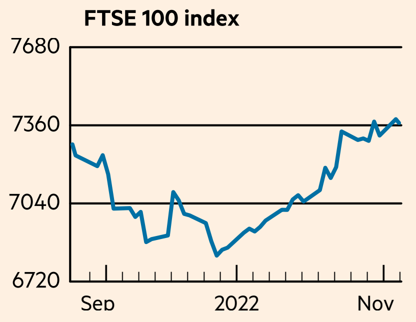
S&P 500 index



Eurofirst 300 index



FTSE 100 index



Biggest movers

%	US		Eurozone		UK	
Ups	Svb Fin	9.80	B. Sabadell	5.68	Centrica	3.38
	Walmart	7.29	Saipem	4.98	Melrose Industries	3.30
	Carnival	6.70	Tenaris	4.74	Scottish Mortgage Investment Trust	3.12
	Paycom Software	5.95	Infineon Tech	4.62	Bae Systems	1.71
	Stanley Black & Decker	5.51	Bayer	4.09	Rightmove	1.54
Downs	Albemarle	-6.87	Grifols	-3.74	Ocado	-16.79
	Capital One Fin	-5.53	Ageas	-3.47	Vodafone	-7.94
	Mosaic (the)	-4.72	Kone	-3.09	Endeavour Mining	-2.93
	Cf Industries Holding	-3.86	Telecom Italia	-2.92	B&m Eur Value Retail S.a.	-2.68
	Synchrony Fin	-2.43	Alstom	-2.46	Severn Trent	-2.47

Prices taken at 17:00 GMT. Based on the constituents of the FTSE Eurofirst 300 Eurozone. All data provided by Morningstar unless otherwise noted.

Wall Street

Better than expected results alongside an upgrade to its guidance lifted **Walmart**, which reported third-quarter earnings of $1.50 per share — 18 cents above Wall Street's estimate.

In a sign of its resilience in the face of escalating prices, the retail giant expected net sales to grow about 5.5 per cent for the full year, up from an earlier forecast of 5 per cent.

Providing a further fillip was the announcement that it would be returning money to investors through a $20bn share buyback programme.

Peers **Target**, **Dollar General** and **Costco** leapt following the update.

Signature Bank, which has exposure to digital currencies, topped the S&P 500 benchmark after disclosing that its deposit relationship with collapsed crypto exchange FTX was "less than 0.1 per cent of . . . overall deposits".

Bath & Body Works rallied on news that activist investor Dan Loeb through his Third Point investment firm had bought $265mn-worth of stock in the personal care and beauty retailer.

Another filing, this time from Warren Buffett's Berkshire Hathaway, lifted the US-listed shares of chipmaker **Taiwan Semiconductor Manufacturing**.

The investor bought a $4.1bn stake in the group, making TSMC the 10th-largest holding in his conglomerate. *Ray Douglas*

Europe

Online pharmacy chain **Zur Rose** fell sharply following a downgrade by Deutsche Bank to "sell" from "hold".

The broker's investment case for the Swiss group rested largely on the nationwide rollout of digital prescriptions in the second half of 2023 but that now seemed unlikely.

"Given Zur Rose's high dependency on the nationwide rollout and its stretched balance sheet, we believe there are significant risks on the horizon for Zur Rose," analysts concluded.

Italy's **Nexi** sank on news that lender Intesa Sanpaolo had sold 67mn shares in the payments group, a 5.1 per cent stake, for €8.7 each — an 11 per cent discount to Monday's closing price.

This followed a 9 per cent jump in Nexi last week after third-quarter revenue and earnings that beat consensus estimates.

France-based outsourcer **Teleperformance** rallied on announcing that it had initiated a meeting with Colombia's ministry of labour to discuss its operations in the country.

Allegations over working conditions in Colombia published by Time magazine triggered a sell-off last week.

However, Citi revealed that management had "found no evidence of wrongdoing", prompting the broker to upgrade Teleperformance from "neutral" to "buy". *Ray Douglas*

London

A ratings change by Jefferies weighed on **Aston Martin**, which was downgraded to "underperform" from "hold".

The maker of luxury cars, which earlier this year raised more than £600mn through a rights issue, would probably need to recapitalise again before it achieved a "viable operating structure", said the broker.

Analysts said it faced two choices: recapitalise once operations "reach viable metrics", such as sustainably positive free cash flow, or await an original equipment manufacturer that could step in and provide the scale that Aston Martin needed.

A confident trading update pushed **BAE Systems** near the top of the FTSE 100 index.

The UK's largest defence and security company had secured orders worth £28bn so far this year, helped by a recent £4.2bn maritime contract.

Against the backdrop of the Ukraine war and heightened geopolitical tension, chief executive Charles Woodburn forecast "sales growth coming from all sectors".

A cut to its full-year outlook sent **Vodafone** lower, with the telecoms operator forecasting adjusted core earnings of between €15n and €15.2bn, trimming the ceiling of an earlier €15bn to €15.5bn range. *Ray Douglas*

UK crisis shows crucial need for policy gradualism

Dario Perkins

Markets Insight

The UK is relevant again in markets. I have spent the last month fielding questions from international investors who, thoroughly bemused by events in Britain, wanted to know whether its turmoil signalled anything about the state of the world economy — whether it is a financial canary in the coal mine.

I tell them the root of the UK's problem was not its "fiscal black hole" but investors' realisation that the country was facing an imminent trade-off between financial and price stability. That is an issue likely to be confronted by other economies.

The unfortunate part of the story is that it has been credited to the mythical bond vigilantes. UK officials are now focused on whether a specific budgetary response will keep the markets happy by filling a hole in the public finances.

Apparently, global investors are no longer prepared to fund the UK's deficits so the government must win back their approval.

While there is a sliver of truth to this, we must be careful not to assign a personality to markets, nor to assume that the pricing of government bonds is designed to impose "discipline" on public decisions. This is not a morality tale.

Markets price probabilistic outcomes based on what is likely to happen, not what should happen. The problem with the ill-conceived "mini" Budget was not its impact on the public finances per se but rather the likely response from the Bank of England.

Bank officials, already uber-hawkish, looked destined to jack up interest rates to levels that would cause stress in the property market. A looming financial crisis is not exactly bullish for the exchange rate. The Treasury had put the BoE in a lose-lose situation, particularly with the US Federal Reserve still raising interest rates aggressively. It could let the pound slide, which would add to already extreme levels of inflation, or it could try to chase the US central bank in an effort to support sterling but only if it was prepared to risk the fallout in the property sector and elsewhere.

From a global perspective, there are a bunch of economies facing the same dilemma — economies with high levels of debt, overpriced housing and an acute sensitivity to higher borrowing costs. One by one, the Reserve Bank of Australia, the Bank of Canada, the BoE and the Norges Bank have realised they cannot win a currency war with the Fed.

> The UK must not return to austerity. There will be a role for governments to support their economies

The UK drama highlights the importance of policy gradualism, not that governments must return to austerity.

With much of the world headed into recession, there will still be a role for governments to support their economies with targeted fiscal interventions.

Austerity is not the answer but neither were large regressive tax cuts and a budget that displayed a bizarre ideological fetish for "trickle-down economics".

With a more gradualist approach to fiscal policy, central banks — notably those with vulnerable property sectors — can pursue a more reasonable monetary policy rather than race the Fed to see who can crash their economies first.

The fiscal-monetary "tug of war" is not going away; there will be plenty more demands on the public finances in the 2020s but, if either arm of government pulls too hard, the outcome is likely to be a highly destructive recession, perhaps even a financial calamity.

The other lesson from the UK crisis is how the vulnerabilities in the financial sector have migrated from banks (the sell side) to institutional investors and "non-banks" (the buy side).

UK pension funds had been engaging in activities that made sense when interest rates were zero but became unsustainable as yields surged higher.

As these institutions reversed these activities, through asset fire sales and the like, they amplified market volatility, creating a dangerous feedback loop.

These are dynamics we have seen before, specifically at the start of the Covid-19 crisis, and they seem endemic to the global credit system that emerged from the rubble of the 2008 crisis.

This is by no means a UK-specific problem. The good news is that central banks have a great deal of influence over the non-bank credit system and, as the BoE has shown, can break these dynamics with relatively modest interventions.

But as the decade-long global search for yield unwinds, investors are facing serious losses.

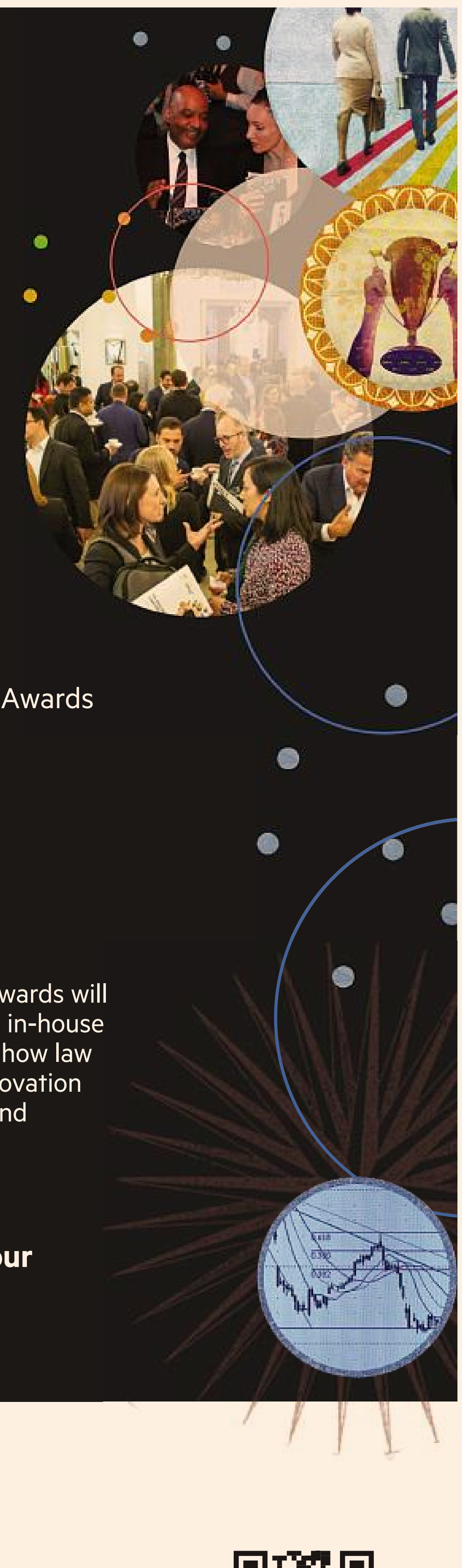
The challenge for central banks is whether they can make these interventions, putting a floor under markets, while simultaneously maintaining the monetary squeeze necessary to bring down inflation. It's a difficult balancing act and fiscal policy going rogue obviously doesn't help.

Dario Perkins is managing director of global macro at TS Lombard

In Collaboration With

FT LIVE

rsgi.co



INNOVATIVE LAWYERS AWARDS NORTH AMERICA

December 5, 18:30-23.30 EST | In-Person Awards
Gotham Hall, New York, US
#FTInnovativeLawyers

SHORTLIST ANNOUNCED

The FT **Innovative Lawyers North America** awards will celebrate innovations from both law firms and in-house teams in the region. The awards will highlight how law firms and in-house legal teams are driving innovation in the legal sector to bring good to business and society.

To view the full shortlist and book your table at the awards, please visit:
lawyersnorthamerica.live.ft.com

Lead Partner
INTEGRA

Partners
iManage
LITERA
THOMSON REUTERS

In-House Partner
WHITE & CASE

MARKET DATA

WORLD MARKETS AT A GLANCE

FT.COM/MARKETSDATA

Change during previous day's trading (%)

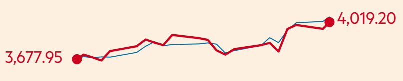
S&P 500	Nasdaq Composite	Dow Jones Ind	FTSE 100	FTSE Eurofirst 300	Nikkei	Hang Seng	FTSE All World $	$ per €	$ per £	¥ per $	£ per €	Oil Brent $ Sep	Gold $
1.57%	2.57%	0.77%	-0.21%	0.37%	0.10%	4.11%	1.47%	0.387%	1.449%	-0.837%	-1.135%	-1.20%	0.54%

Stock Market movements over last 30 days, with the FTSE All-World in the same currency as a comparison

AMERICAS

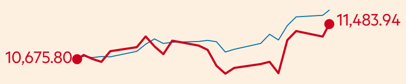
Oct 16 - - — Index — All World

S&P 500 New York



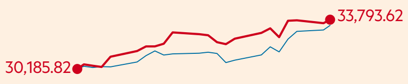
Day ↗1.57% Month ↗12.08% Year ↘-14.24%

Nasdaq Composite New York



Day ↗2.57% Month ↗11.17% Year ↘-27.62%

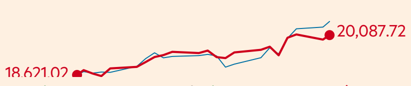
Dow Jones Industrial New York



Day ↗0.77% Month ↗14.04% Year ↘-6.35%

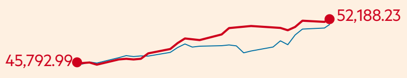
Oct 16 - Nov 15 — Index — All World

S&P/TSX COMP Toronto



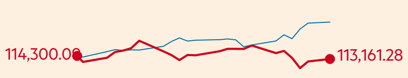
Day ↗0.59% Month ↗9.35% Year ↘-7.58%

IPC Mexico City



Day ↗0.47% Month ↗14.54% Year ↗1.20%

Bovespa São Paulo

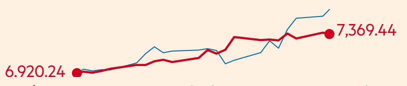


Day ↗0.81% Month ↗0.97% Year ↗6.42%

EUROPE

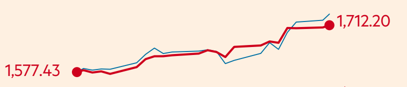
Oct 16 - Nov 15 — Index — All World

FTSE 100 London



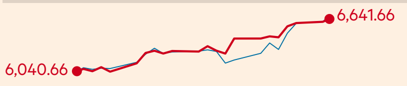
Day ↘-0.21% Month ↗7.82% Year ↗0.11%

FTSE Eurofirst 300 Europe



Day ↗0.37% Month ↗10.40% Year ↘-9.46%

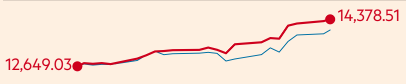
CAC 40 Paris



Day ↗0.49% Month ↗11.96% Year ↘-6.34%

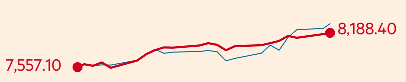
Oct 16 - Nov 15 — Index — All World

Xetra Dax Frankfurt



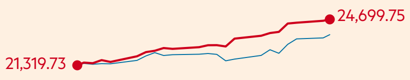
Day ↗0.46% Month ↗8.46% Year NaN%

Ibex 35 Madrid



Day ↗0.27% Month ↗10.92% Year ↘-9.83%

FTSE MIB Milan

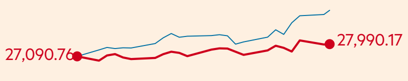


Day ↗0.42% Month ↗17.91% Year ↘-11.01%

ASIA

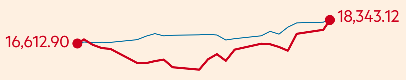
Oct 16 - Nov 15 — Index — All World

Nikkei 225 Tokyo



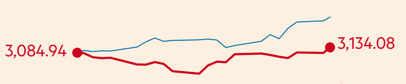
Day ↗0.10% Month ↗3.34% Year ↘-5.45%

Hang Seng Hong Kong



Day ↗4.11% Month ↗10.32% Year ↘-27.75%

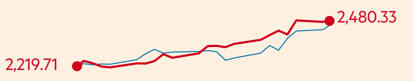
Shanghai Composite Shanghai



Day ↗1.64% Month ↗2.02% Year ↘-11.44%

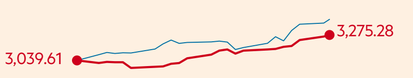
Oct 16 - Nov 15 — Index — All World

Kospi Seoul



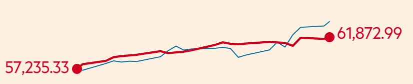
Day ↗0.23% Month ↗12.10% Year ↘-16.45%

FTSE Straits Times Singapore



Day ↗0.44% Month ↗7.67% Year ↗1.37%

BSE Sensex Mumbai



Day ↗0.40% Month ↗6.93% Year ↗2.06%

Country	Index	Latest	Previous
Argentina	Merval	156407.85	152685.42
Australia	All Ordinaries	7345.40	7350.20
	S&P/ASX 200	7141.60	7146.30
	S&P/ASX 200 Res	5921.50	5994.80
Austria	ATX	3224.43	3205.70
Belgium	BEL 20	3667.12	3671.77
	BEL Mid	9580.18	9612.38
Brazil	IBovespa	113161.28	112253.49
Canada	S&P/TSX 60	1213.18	1206.14
	S&P/TSX Comp	20039.18	19921.81
	S&P/TSX Div Met & Min	1374.09	1407.74
Chile	S&P/CLX IGPA Gen	28250.60	28852.35
China	FTSE A200	10225.55	10050.63
	FTSE B35	9000.71	8988.96
	Shanghai A	3284.87	3231.77
	Shanghai B	292.64	288.74
	Shanghai Comp	3134.08	3083.40
	Shenzhen A	2148.97	2105.75
	Shenzhen B	1138.06	1125.21
Colombia	COLCAP	1261.61	1260.21
Croatia	CROBEX	2013.05	2011.29

Country	Index	Latest	Previous
Cyprus	CSE M&P Gen	68.46	68.68
Czech Republic	PX	1246.81	1257.30
Denmark	OMXC Copenahgen 20	1716.55	1727.36
Egypt	EGX 30	12137.00	12136.37
Estonia	OMX Tallinn	1742.28	1754.37
Finland	OMX Helsinki General	10981.57	10980.13
France	CAC 40	6641.66	6609.17
	SBF 120	5105.06	5082.08
Germany	M-DAX	26181.16	26304.83
	TecDAX	3129.61	3119.62
	XETRA Dax	14378.51	14313.30
Greece	Athens Gen	903.00	900.30
	FTSE/ASE 20	2194.25	2189.22
Hong Kong	Hang Seng	18343.12	17619.71
	HS China Enterprise	6269.29	5979.80
	HSCC Red Chip	3510.78	3440.88
Hungary	Bux	44308.29	44157.71
India	BSE Sensex	61872.99	61624.15
	Nifty 500	15693.90	15650.20
Indonesia	Jakarta Comp	7035.50	7019.39
Ireland	ISEQ Overall	7285.21	7235.90
Israel	Tel Aviv 125	1966.39	1986.41

Country	Index	Latest	Previous
Italy	FTSE Italia All-Share	26734.67	26637.92
	FTSE Italia Mid Cap	40147.29	40201.20
	FTSE MIB	24699.75	24596.69
Japan	2nd Section	7228.27	7239.06
	Nikkei 225	27990.17	27963.47
	S&P Topix 150	1692.80	1687.12
	Topix	1930.17	1935.49
Jordan	Amman SE	2443.78	2437.51
Kenya	NSE 20	1658.65	1655.89
Kuwait	KSX Market Index	6633.44	6603.51
Latvia	OMX Riga	1107.02	1103.73
Lithuania	OMX Vilnius	918.55	913.00
Luxembourg	LuxX	1459.83	1475.87
Malaysia	FTSE Bursa KLCI	1450.54	1464.00
Mexico	IPC	52030.64	51785.13
Morocco	MASI	10466.66	10355.27
Netherlands	AEX	716.43	706.67
	AEX All Share	976.16	962.64
New Zealand	NZX 50	11239.14	11231.97
Nigeria	SE All Share	43818.12	43968.75
Norway	Oslo All Share	1017.37	1006.88
Pakistan	KSE 100	42796.85	42850.83

Country	Index	Latest	Previous
Philippines	Manila Comp	6418.94	6286.77
Poland	Wig	56341.63	55812.08
Portugal	PSI 20	5818.28	5779.84
	PSI General	4439.23	4411.13
Romania	BET Index	11656.53	11625.07
Russia	Micex Index	2436.57	2445.30
	RTX	1245.71	1212.57
Saudi-Arabia	TADAWUL All Share Index	11197.46	11246.93
Singapore	FTSE Straits Times	3275.28	3260.80
Slovakia	SAX	331.17	337.60
Slovenia	SBI TOP	-	-
South Africa	FTSE/JSE All Share	72998.69	72822.47
	FTSE/JSE Res 20	72797.48	71846.65
	FTSE/JSE Top 40	66524.92	66289.27
South Korea	Kospi	2480.33	2474.65
	Kospi 200	322.31	321.53
Spain	IBEX 35	8188.40	8166.50
Sri Lanka	CSE All Share	8291.52	8363.29
Sweden	OMX Stockholm 30	2098.01	2107.99
	OMX Stockholm AS	808.46	814.44
Switzerland	SMI Index	11026.22	10999.59

Country	Index	Latest	Previous
Taiwan	Weighted Pr	14546.31	14174.90
Thailand	Bangkok SET	1629.38	1623.38
Turkey	BIST 100	4657.00	4657.00
UAE	Abu Dhabi General Index	9222.93	9251.11
UK	FT 30	2483.50	2512.20
	FTSE 100	7369.44	7385.17
	FTSE 4Good UK	6661.66	6683.05
	FTSE All Share	4055.88	4067.93
	FTSE techMARK 100	6252.76	6227.81
USA	DJ Composite	11305.84	11200.57
	DJ Industrial	33793.62	33536.70
	DJ Transport	14749.42	14532.58
	DJ Utilities	924.11	918.81
	Nasdaq 100	12001.92	11700.94
	Nasdaq Cmp	11483.94	11196.22
	NYSE Comp	15445.91	15228.98
	S&P 500	4019.20	3957.25
	Wilshire 5000	40128.32	39438.76
Venezuela	IBC	10545.88	10175.85
Vietnam	VNI	911.90	941.04

Country	Index	Latest	Previous
Cross-Border	DJ Global Titans ($)	425.31	417.15
	Euro Stoxx 50 (Eur)	3906.77	3887.51
	Euronext 100 ID	1266.76	1257.38
	FTSE 4Good Global ($)	9777.15	9627.02
	FTSE All World ($)	411.48	405.50
	FTSE E300	1712.20	1705.81
	FTSE Eurotop 100	3363.43	3348.70
	FTSE Global 100 ($)	2533.19	2490.86
	FTSE Gold Min ($)	1666.97	1675.83
	FTSE Latibex Top (Eur)	4440.00	4432.20
	FTSE Multinationals ($)	2647.81	2664.48
	FTSE World ($)	747.19	736.88
	FTSEurofirst 100 (Eur)	4534.78	4503.79
	FTSEurofirst 80 (Eur)	5320.38	5288.20
	MSCI ACWI Fr ($)	614.79	618.66
	MSCI All World ($)	2653.94	2674.08
	MSCI Europe (Eur)	1746.12	1740.47
	MSCI Pacific ($)	2568.06	2595.38
	S&P Euro (Eur)	1755.40	1745.38
	S&P Europe 350 (Eur)	1756.39	1750.22
	S&P Global 1200 ($)	2967.36	2925.42
	Stoxx 50 (Eur)	3686.09	3673.01

(c) Closed. (u) Unavaliable. † Correction. ♥ Subject to official recalculation. For more index coverage please see www.ft.com/worldindices. A fuller version of this table is available on the ft.com research data archive.

STOCK MARKET: BIGGEST MOVERS

AMERICA

ACTIVE STOCKS	stock traded m's	close price	Day's change
Tesla	95.2	198.87	7.92
Apple	53.9	152.73	4.45
Amazon.com	52.1	100.80	2.31
Advanced Micro Devices	44.5	77.40	3.87
Nvidia	42.2	167.93	4.98
Microsoft	28.2	245.30	3.75
Walmart	22.1	148.48	10.09
Netflix	20.6	311.37	12.10
Alphabet	18.3	99.73	4.03
Home Depot	17.9	314.49	7.57
BIGGEST MOVERS	**Close price**	**Day's change**	**Day's chng%**
Ups			
Svb Fin	241.29	21.53	9.80
Walmart	148.48	10.09	7.29
Carnival	11.31	0.71	6.70
Paycom Software	349.44	19.62	5.95
Stanley Black & Decker	85.64	4.47	5.51
Downs			
Albemarle	294.62	-21.73	-6.87
Capital One Fin	105.40	-6.17	-5.53
Mosaic (the)	50.62	-2.51	-4.72
Cf Industries Holding	103.60	-4.16	-3.86
Synchrony Fin	36.83	-0.92	-2.43

Based on the constituents of the S&P500

LONDON

ACTIVE STOCKS	stock traded m's	close price	Day's change
Vodafone	196.0	95.89	-8.27
Shell	178.7	2375.00	17.00
Astrazeneca	152.3	10800.00	-68.00
Aveva	151.3	3180.00	4.00
Glencore	146.3	519.50	7.50
Bp	138.8	477.05	-3.45
Unilever	132.4	4033.50	1.00
Rio Tinto	123.4	5459.00	52.00
Gsk	104.0	1354.20	-10.80
Anglo American	94.0	3344.50	25.50
BIGGEST MOVERS	**Close price**	**Day's change**	**Day's chng%**
Ups			
Carnival	843.80	34.40	4.25
Fidelity China Special Situations	220.00	8.00	3.77
Centrica	86.28	2.82	3.38
Melrose Industries	131.40	4.20	3.30
Petrofac	125.50	3.80	3.12
Downs			
Ocado	770.20	-155.40	-16.79
Vodafone	95.89	-8.27	-7.94
Synthomer	143.70	-11.10	-7.17
Aston Martin Lagonda Global Holdings	133.10	-9.95	-6.96
Baltic Classifieds	141.40	-10.20	-6.73

Based on the constituents of the FTSE 350 index

EURO MARKETS

ACTIVE STOCKS	stock traded m's	close price	Day's change
Roche Gs	585.1	321.26	2.14
Asml Holding	403.1	576.20	10.90
Nestle N	337.8	109.99	-0.33
Novartis N	327.7	81.31	0.88
Prosus	232.9	58.79	3.63
Eni	218.2	14.48	0.00
Intesa Sanpaolo	215.3	2.19	0.00
Totalenergies	201.2	57.69	0.77
Unicredit	195.4	13.05	0.18
Allianz Se Na O.n.	169.1	200.35	-1.65
BIGGEST MOVERS	**Close price**	**Day's change**	**Day's chng%**
Ups			
Prosus	58.79	3.63	6.58
Infineon Tech.ag Na O.n.	32.98	1.51	4.80
Bayer Ag Na O.n.	53.42	2.10	4.09
Vestas Wind Systems A/s	24.32	0.65	2.76
Orsted A/s Dk 10	11.91	0.31	2.68
Downs			
Atlas Copco Ab Ser. A	12.09	-0.30	-2.40
Sartorius Ag Vzo O.n.	404.00	-9.70	-2.34
Basf Se Na O.n.	50.23	-1.05	-2.05
Umg	21.47	-0.43	-1.99
Pernod Ricard	184.70	-3.55	-1.89

Based on the constituents of the FTSEurofirst 300 Eurozone index

TOKYO

ACTIVE STOCKS	stock traded m's	close price	Day's change
Softbank .	1586.6	6147.00	79.00
Tokyo Electron	758.9	45650.00	250.00
Sumitomo Mitsui Fin,.	577.8	4468.00	179.00
Mitsubishi Ufj Fin,.	565.3	722.50	19.20
Recruit Hldgs Co Ltd	513.1	4573.00	-327.00
Nintendo Co.,	432.4	5764.00	105.00
Kddi	368.7	4046.00	-114.00
Toyota Motor	357.2	1998.00	12.00
Fast Retailing Co.,	341.8	83050.00	-400.00
Nippon Yusen Kabushiki Kaisha	307.0	2781.00	63.00
BIGGEST MOVERS	**Close price**	**Day's change**	**Day's chng%**
Ups			
Fujikura	1091.00	59.00	5.72
Eisai Co.,	8753.00	465.00	5.61
Pacific Metals Co.,	1932.00	79.00	4.26
Sumitomo Mitsui Fin,.	4468.00	179.00	4.17
Sumitomo Metal Mining Co.,	4735.00	183.00	4.02
Downs			
Citizen Holdings Co.,	556.00	-40.00	-6.71
Recruit Hldgs Co Ltd	4573.00	-327.00	-6.67
Dentsu .	4415.00	-280.00	-5.96
Thb Japan Steel Works,	2973.00	-157.00	-5.02
Sapporo Holdings	3310.00	-95.00	-2.79

Based on the constituents of the Nikkei 225 index

UK MARKET WINNERS AND LOSERS

FTSE 100	Nov 15 price(p)	%Chg week	%Chg ytd
Winners			
Centrica	86.28	12.1	20.8
Schroders	467.30	11.7	-
Scottish Mortgage Investment Trust	833.80	11.2	-38.0
Jd Sports Fashion	119.75	11.0	-
Hargreaves Lansdown	909.60	10.6	-33.2
St. James's Place	1198.00	10.4	-
Rightmove	566.00	10.2	-
Dechra Pharmaceuticals	2880.00	9.8	-
Prudential	1000.00	9.7	-
Ocado	770.20	9.5	-
Kingfisher	246.00	9.2	-
Anglo American	3344.50	9.2	10.8
Losers			
Harbour Energy	345.70	-11.1	-1.9
Vodafone	95.89	-9.7	-
Bae Systems	738.60	-6.1	35.7
Imperial Brands	2027.00	-5.1	24.9
British American Tobacco	3228.50	-3.7	18.1
Airtel Africa	117.00	-3.0	-
Flutter Entertainment	11455.00	-2.8	-2.5
Shell	2375.00	-2.6	46.7
Relx	2256.00	-2.5	-6.6
Gsk	1354.20	-2.4	-
Bp	477.05	-1.8	43.1
Rentokil Initial	532.00	-1.7	-7.9

FTSE 250	Nov 15 price(p)	%Chg week	%Chg ytd
Winners			
Carnival	843.80	21.2	-
Molten Ventures	461.00	19.2	-
Ferrexpo	145.70	17.4	-
Liontrust Asset Management	1170.00	17.2	-
Currys	82.95	16.0	-27.6
Domino's Pizza	283.00	15.8	-
Moonpig	172.20	15.1	-
Ashmore	245.60	14.8	-
Dr. Martens	289.00	12.9	-
Future	1554.00	12.9	-
Ascential	227.60	12.7	-
Games Workshop	7400.00	12.4	-
Losers			
Firstgroup	95.00	-11.1	-7.3
Vietnam Enterprise Investments	500.00	-6.7	-
Baltic Classifieds	141.40	-5.7	-
Warehouse Reit	115.40	-5.7	-
Home Reit	79.20	-5.5	-
Aston Martin Lagonda Global Holdings	133.10	-5.4	-
Qinetiq	343.20	-4.2	28.2
Vinacapital Vietnam Opportunity Fund Ltd	392.00	-3.9	-
Balanced Commercial Property Trust	90.00	-3.6	-
Energean	1475.00	-3.4	70.0
Beazley	625.00	-3.0	33.3
Target Healthcare Reit	84.00	-3.0	-

FTSE SmallCap	Nov 15 price(p)	%Chg week	%Chg ytd
Winners			
Superdry	131.40	22.8	-
Rank	71.00	19.3	-
Hochschild Mining	69.50	18.9	-46.1
Jpmorgan China Growth & ome	327.25	17.7	-
Card Factory	58.60	17.3	-1.3
Capital & Regional	51.00	15.4	-
Seraphim Space Investment Trust	49.75	14.6	-
Lsl Property Services	259.00	13.6	-
Dwf	77.00	13.2	-
Baillie Gifford China Growth Trust	260.50	12.9	-
Funding Circle Holdings	48.35	12.4	-
Norcros	196.50	12.3	-
Losers			
The Gym	98.00	-20.7	-
Dignity	395.00	-11.2	-
Petra Diamonds	100.00	-9.9	39.9
Esken	5.70	-8.7	-
Blackrock Latin American Investment Trust	385.50	-7.3	14.5
Galliford Try Holdings	154.00	-6.3	-
Taylor Maritime Investments	89.60	-6.3	-
Enquest	27.15	-6.1	44.8
Trifast	58.00	-4.9	-63.8
Gcp Asset Backed ome Fund	78.20	-4.6	-
Renewi	540.00	-4.6	-
Atrato Onsite Energy	86.10	-4.2	-21.4

Industry Sectors	Nov 15 price(p)	%Chg week	%Chg ytd
Winners			
Real Estate & Investment Servic	2266.02	9.2	-
Electronic & Electrical Equip.	9507.60	9.1	-
Personal Goods	33416.97	8.4	-7.1
Mining	10456.46	7.6	-
Industrial Engineering	14911.21	6.8	-
Industrial Transportation	3687.74	6.4	-
Chemicals	12165.90	6.2	-
Gas Water & Multiutilities index	5658.24	5.9	-4.8
Software & Computer Services	1870.19	5.9	-
Life Insurance	6577.44	5.8	-
Support Services	10266.96	5.1	-
Construction & Materials	6977.28	5.0	-
Losers			
Oil & Gas Producers	8278.07	-5.6	44.4
Tobacco	35032.03	-4.6	19.4
Aerospace & Defense	4606.73	-4.4	9.8
Mobile Telecommunications	2390.72	-3.9	-
General Retailers	3241.00	-2.4	11.3
Beverages	27590.59	-1.6	-
Banks	3102.76	0.1	1.5
Food & Drug Retailers	4040.50	0.2	-7.7
Pharmaceuticals & Biotech.	20022.84	0.6	6.6
Nonlife Insurance	3147.71	0.8	-4.3
Health Care Equip.& Services	10832.61	0.9	31.4
Media	9083.75	1.1	-7.3

Based on last week's performance. †Price at suspension.

CURRENCIES

Nov 15	Currency	DOLLAR Closing Mid	DOLLAR Day's Change	EURO Closing Mid	EURO Day's Change	POUND Closing Mid	POUND Day's Change
Argentina	Argentine Peso	162.1260	0.3605	168.0672	0.9385	192.8809	3.0821
Australia	Australian Dollar	1.4759	-0.0141	1.5300	-0.0094	1.7559	0.0077
Bahrain	Bahrainin Dinar	0.3769	-0.0001	0.3907	0.0013	0.4484	0.0061
Bolivia	Bolivian Boliviano	6.9100	-	7.1632	0.0241	8.2208	0.1133
Brazil	Brazilian Real	5.3253	0.0071	5.5204	0.0259	6.3355	0.0956
Canada	Canadian Dollar	1.3296	0.0024	1.3783	0.0072	1.5818	0.0247
Chile	Chilean Peso	886.6350	-11.0150	919.1262	-8.2845	1054.8273	1.6182
China	Chinese Yuan	7.0339	-0.0051	7.2917	0.0192	8.3682	0.1093
Colombia	Colombian Peso	4806.9800	-2.5200	4983.1346	14.1806	5718.8510	75.8827
Costa Rica	Costa Rican Colon	613.8100	3.0100	636.3033	5.2529	730.2481	13.5990
Czech Republic	Czech Koruna	23.4535	-0.0635	24.3129	0.0163	27.9025	0.3102
Denmark	Danish Krone	7.1755	-0.0241	7.4384	0.0002	8.5367	0.0894
Egypt	Egyptian Pound	24.4566	0.0258	25.3528	0.1120	29.0959	0.4314
Hong Kong	Hong Kong Dollar	7.8229	-0.0132	8.1096	0.0137	9.3069	0.1128
Hungary	Hungarian Forint	392.9002	-4.4284	407.2982	-3.2034	467.4323	1.2483
India	Indian Rupee	81.1075	-0.1500	84.0797	0.1282	96.4934	1.1543

Nov 15	Currency	DOLLAR Closing Mid	DOLLAR Day's Change	EURO Closing Mid	EURO Day's Change	POUND Closing Mid	POUND Day's Change
Indonesia	Indonesian Rupiah	15537.5000	20.0000	16106.8983	74.9112	18484.9375	278.2921
Israel	Israeli Shekel	3.4124	-0.0202	3.5374	-0.0089	4.0597	0.0323
Japan	Japanese Yen	139.2400	-1.1750	144.3425	-0.7278	165.6534	0.9051
..One Month		139.2395	-1.1760	144.3423	-0.7282	165.6530	0.9042
..Three Month		139.2383	-1.1785	144.3418	-0.7293	165.6519	0.9020
..One Year		139.2330	-1.1892	144.3386	-0.7357	165.6530	0.8974
Kenya	Kenyan Shilling	122.0000	0.1000	126.4707	0.5293	145.1431	2.1183
Kuwait	Kuwaiti Dinar	0.3078	-0.0002	0.3190	0.0009	0.3661	0.0048
Malaysia	Malaysian Ringgit	4.5455	-0.0508	4.7121	-0.0366	5.4078	0.0150
Mexico	Mexican Peso	19.3773	-0.0223	20.0873	0.0447	23.0531	0.2917
New Zealand	New Zealand Dollar	1.6226	-0.0147	1.6821	-0.0096	1.9304	0.0093
Nigeria	Nigerian Naira	443.7500	-	460.0114	1.5494	527.9282	7.2781
Norway	Norwegian Krone	9.9742	-0.0307	10.3397	0.0031	11.8663	0.1275
Pakistan	Pakistani Rupee	221.9000	0.3400	230.0316	1.1260	263.9938	4.0384
Peru	Peruvian Nuevo Sol	3.8259	-0.0396	3.9662	-0.0275	4.5517	0.0163
Philippines	Philippine Peso	57.2150	-0.0600	59.3117	0.1378	68.0685	0.8680

Nov 15	Currency	DOLLAR Closing Mid	DOLLAR Day's Change	EURO Closing Mid	EURO Day's Change	POUND Closing Mid	POUND Day's Change
Poland	Polish Zloty	4.5203	-0.0412	4.6859	-0.0268	5.3778	0.0257
Romania	Romanian Leu	4.7358	-0.0089	4.9093	0.0073	5.6342	0.0672
Russia	Russian Ruble	60.7500	-0.2750	62.9762	-0.0720	72.2741	0.6737
Saudi Arabia	Saudi Riyal	3.7580	-0.0006	3.8957	0.0125	4.4709	0.0609
Singapore	Singapore Dollar	1.3699	-0.0028	1.4201	0.0019	1.6298	0.0192
South Africa	South African Rand	17.2713	-0.0106	17.9042	0.0493	20.5476	0.2708
South Korea	South Korean Won	1317.6000	-8.3000	1365.8842	-3.9747	1567.5453	11.8723
Sweden	Swedish Krona	10.4347	-0.0345	10.8171	0.0008	12.4141	0.1307
Switzerland	Swiss Franc	0.9451	-0.0006	0.9797	0.0027	1.1244	0.0148
Taiwan	New Taiwan Dollar	31.0475	-0.0235	32.1852	0.0841	36.9371	0.4817
Thailand	Thai Baht	35.5650	-0.3475	36.8683	-0.2348	42.3116	0.1756
Tunisia	Tunisian Dinar	3.2334	0.0173	3.3518	0.0292	3.8467	0.0733
Turkey	Turkish Lira	18.6110	0.0050	19.2930	0.0701	22.1415	0.3111
United Arab Emirates	UAE Dirham	3.6731	0.0000	3.8077	0.0129	4.3698	0.0603
United Kingdom	Pound Sterling	0.8405	-0.0118	0.8714	-0.0092	-	-
..One Month		0.8406	-0.0117	0.8712	-0.0092	-	-

Nov 15	Currency	DOLLAR Closing Mid	DOLLAR Day's Change	EURO Closing Mid	EURO Day's Change	POUND Closing Mid	POUND Day's Change
..Three Month		0.8409	-0.0118	0.8710	-0.0092	-	-
..One Year		0.8414	-0.0118	0.8699	-0.0092	-	-
United States	United States Dollar	-	-	1.0366	0.0035	1.1897	0.0164
..One Month		-	-	1.0364	-0.1367	1.1898	0.0164
..Three Month		-	-	1.0359	-0.1366	1.1900	0.0164
..One Year		-	-	1.0341	-0.1367	1.1906	0.0164
Vietnam	Vietnamese Dong	24775.0000	30.0000	25682.9085	117.4648	29474.7887	441.5660
European Union	Euro	0.9647	-0.0033	-	-	1.1476	0.0120
..One Month		0.9644	-0.0033	-	-	1.1475	0.0120
..Three Month		0.9639	-0.0033	-	-	1.1473	0.0120
..One Year		0.9621	-0.0033	-	-	1.1461	0.0120

Rates are derived from WM Reuters Spot Rates and MorningStar (latest rates at time of production). Some values are rounded. Currency redenominated by 1000. The exchange rates printed in this table are also available at www.FT.com/marketsdata

FTSE ACTUARIES SHARE INDICES

UK SERIES www.ft.com/equities

Produced in conjunction with the Institute and Faculty of Actuaries

	£ Strlg Nov 15	Day's chge%	Euro Index	£ Strlg Nov 14	£ Strlg Nov 11	Year ago	Div yield%	Cover	P/E ratio	X/D adj	Total Return
FTSE 100 (100)	7369.44	-0.21	6574.51	7385.17	7318.04	7351.86	3.70	1.63	16.60	248.91	7548.38
FTSE 250 (250)	19455.88	-0.85	17357.21	19622.25	19616.21	23621.58	3.07	0.93	35.17	493.01	16148.71
FTSE 250 ex Inv Co (174)	19943.57	-0.98	17792.29	20140.49	20126.06	24464.53	3.17	1.47	21.46	528.11	16894.21
FTSE 350 (350)	4094.09	-0.31	3652.47	4106.80	4074.95	4217.79	3.61	1.54	18.04	133.01	8321.56
FTSE 350 ex Investment Trusts (271)	4025.94	-0.32	3591.67	4038.70	4005.24	4105.38	3.67	1.70	16.03	133.46	4229.20
FTSE 350 Higher Yield (131)	3505.82	-0.35	3127.66	3518.00	3489.68	3292.41	5.11	1.76	11.11	150.01	8026.90
FTSE 350 Lower Yield (219)	4269.60	-0.27	3809.05	4281.23	4249.33	4915.35	2.06	0.96	50.40	89.16	5253.73
FTSE SmallCap (237)	6224.58	0.21	5553.15	6211.82	6191.42	7544.29	3.43	0.49	59.73	191.19	10448.07
FTSE SmallCap ex Inv Co (126)	4976.06	0.22	4439.30	4965.24	4946.93	6307.13	3.62	2.41	11.45	144.72	8678.77
FTSE All-Share (587)	4055.88	-0.30	3618.38	4067.93	4036.84	4199.12	3.60	1.51	18.37	131.55	8324.82
FTSE All-Share ex Inv Co (397)	3953.36	-0.31	3526.91	3965.59	3932.99	4045.42	3.67	1.71	15.94	130.82	4216.52
FTSE All-Share ex Multinationals (524)	1085.75	-0.88	805.75	1095.40	1093.80	1353.94	3.86	1.03	25.21	36.31	2304.74
FTSE Fledgling (82)	11537.51	-0.01	10292.98	11538.22	11524.98	13589.61	3.72	4.75	5.66	331.42	24944.11
FTSE Fledgling ex Inv Co (32)	15037.28	0.42	13415.24	14974.47	14973.76	18433.64	3.41	8.05	3.64	432.38	31580.50
FTSE All-Small (319)	4339.70	0.19	3871.59	4331.31	4317.59	5251.76	3.45	0.74	39.32	132.87	9342.77
FTSE All-Small ex Inv Co (158)	3743.86	0.23	3340.02	3735.44	3722.17	4739.63	3.61	2.61	10.61	108.85	8269.85
FTSE AIM All-Share (759)	848.46	-0.36	756.94	851.55	854.84	1254.78	1.61	1.52	40.96	11.82	995.70
FTSE All-Share Technology (21)	2002.77	-0.39	1639.09	2010.55	2012.33	2336.88	1.90	0.80	65.59	38.02	2898.65
FTSE All-Share Telecommunications (6)	1554.93	-5.62	1272.57	1647.46	1629.05	1843.99	6.75	1.04	14.31	58.51	2315.31
FTSE All-Share Health Care (14)	13964.43	-0.67	11428.67	14058.24	13727.48	13441.96	2.85	0.99	35.47	343.37	12905.04
FTSE All-Share Financials (254)	4495.28	-0.21	3678.99	4504.84	4494.19	5016.67	3.75	1.13	23.71	159.03	4995.24
FTSE All-Share Real Estate (55)	864.68	-0.18	740.30	866.26	876.40	1195.17	4.00	4.33	5.77	28.87	906.83
FTSE All-Share Consumer Discretionary (84)	4570.42	-0.17	3740.49	4578.01	4546.84	5514.19	2.35	1.05	40.55	101.72	4841.80
FTSE All-Share Consumer Staples (24)	19090.06	-0.81	15623.56	19246.41	18882.14	19278.01	3.99	1.13	22.11	617.01	17436.43
FTSE All-Share Industrials (84)	6320.30	0.05	5172.62	6317.36	6309.49	7430.49	2.26	1.36	32.46	131.14	7311.72
FTSE All-Share Basic Materials (22)	9000.16	0.67	7365.85	8940.23	8894.97	7851.99	6.04	2.01	8.23	536.92	12266.85
FTSE All-Share Energy (13)	8563.60	0.22	7008.56	8544.55	8547.59	6134.71	3.51	2.74	10.38	301.53	10418.33
FTSE All-Share Utilities (10)	8374.03	-0.31	6853.42	8400.12	8297.68	8340.46	4.55	0.68	32.31	293.03	12650.94
FTSE All-Share Software and Computer Services (18)	2158.88	-0.40	1766.85	2167.60	2170.75	2508.09	1.90	0.80	65.63	41.24	3305.93
FTSE All-Share Technology Hardware and Equipment (3)	5205.85	-0.01	4260.54	5206.53	5138.25	6887.76	1.70	0.91	64.62	78.21	6728.14
FTSE All-Share Telecommunications Equipment (1)	616.97	0.07	504.93	616.52	616.07	651.29	1.99	2.31	21.74	11.51	881.90
FTSE All-Share Telecommunications Service Providers (5)	2387.10	-5.86	1953.63	2535.76	2506.27	2842.49	6.97	1.02	14.09	91.72	3235.51
FTSE All-Share Health Care Providers (3)	10923.32	-0.09	8939.79	10933.17	10912.72	8687.23	0.53	4.48	41.85	58.27	10138.61
FTSE All-Share Medical Equipment and Services (2)	5336.34	-0.47	4367.33	5361.59	5335.33	6219.26	2.68	0.97	38.72	142.76	5154.70
FTSE All-Share Pharmaceuticals and Biotechnology (9)	19962.28	-0.68	16337.39	20099.83	19601.83	19036.96	2.88	0.98	35.25	492.51	16608.93
FTSE All-Share Banks (12)	3061.53	-0.06	2505.60	3063.38	3026.74	3016.28	4.25	2.61	9.03	128.47	2709.32
FTSE All-Share Finance and Credit Services (8)	10866.40	-0.42	8893.21	10911.87	11163.08	10208.39	1.92	2.05	25.39	208.86	14600.59
FTSE All-Share Investment Banking and Brokerage Services (31)	8694.28	-0.65	7115.51	8751.16	8814.98	10906.98	5.08	1.71	11.49	387.97	12210.69
FTSE All-Share Closed End Investments (190)	11944.72	-0.12	9775.72	11958.80	11967.91	14573.31	2.61	-2.50	-15.34	270.41	7465.56
FTSE All-Share Life Insurance (6)	6693.34	-0.11	5477.92	6700.86	6716.44	8391.43	4.58	1.08	20.21	294.59	8190.96
FTSE All-Share Nonlife Insurance (7)	3539.95	-0.96	2897.14	3574.15	3501.70	3573.51	4.08	1.24	19.80	130.27	7538.82
FTSE All-Share Real Estate Investment and Services (10)	2165.09	0.44	1771.94	2155.54	2162.37	3050.44	2.33	3.76	11.43	41.03	6455.92
FTSE All-Share Real Estate Investment Trusts (45)	2152.64	-0.29	1761.75	2158.99	2187.54	2955.56	4.30	4.39	5.29	78.21	3252.32
FTSE All-Share Automobiles and Parts (2)	1394.86	-5.04	1141.57	1468.82	1577.25	3991.06	0.70	-53.35	-2.69	14.02	1451.13
FTSE All-Share Consumer Services (2)	3043.41	1.36	2490.77	3002.65	2946.86	2543.46	1.26	1.71	46.32	38.43	3860.56
FTSE All-Share Household Goods and Home Construction (12)	8575.05	-0.69	7017.93	8634.44	8711.21	13969.40	8.68	1.60	7.19	665.58	7675.40
FTSE All-Share Leisure Goods (2)	20014.31	-1.37	16379.97	20292.50	19991.14	24690.60	3.38	1.59	18.59	831.45	22367.58
FTSE All-Share Personal Goods (4)	28769.53	0.26	23545.36	28696.12	28409.82	31580.11	1.80	2.81	19.76	402.68	22502.23
FTSE All-Share Media (11)	9329.89	0.02	7635.70	9328.32	9194.89	10009.13	2.38	1.45	28.99	221.42	6564.53
FTSE All-Share Retailers (22)	1910.59	-1.19	1563.65	1933.67	1911.70	2828.94	2.65	3.64	10.35	45.23	2481.47
FTSE All-Share Travel and Leisure (29)	6376.64	-0.36	5218.73	6399.51	6424.91	7996.71	0.63	-9.71	-16.34	40.16	6594.64
FTSE All-Share Beverages (5)	27691.74	-1.18	22663.28	28023.39	27737.71	29671.69	2.16	1.99	23.21	584.47	22192.64
FTSE All-Share Food Producers (10)	5746.51	-0.47	4703.02	5773.41	5769.61	6978.33	2.57	2.34	16.63	85.60	5534.54
FTSE All-Share Tobacco (2)	35032.09	-0.77	28670.73	35303.51	34554.82	28237.30	6.76	0.87	17.00	1728.22	32742.57
FTSE All-Share Construction and Materials (15)	7388.27	0.39	6046.66	7359.90	7374.31	8774.26	3.12	0.64	49.90	227.86	9011.85
FTSE All-Share Aerospace and Defense (7)	4847.72	0.87	3967.44	4806.06	4713.80	4689.09	2.43	0.15	277.75	104.10	5912.72
FTSE All-Share Electronic and Electrical Equipment (10)	11166.44	-1.12	9138.76	11292.48	11163.46	14459.59	1.57	1.98	32.15	159.06	11041.63
FTSE All-Share General Industrials (8)	5068.77	0.14	4148.34	5061.61	5045.88	5675.49	2.81	1.17	30.52	134.98	6685.65
FTSE All-Share Industrial Engineering (5)	16470.81	-0.97	13479.93	16632.87	16654.60	21316.67	1.59	2.01	31.36	261.52	22124.76
FTSE All-Share Industrial Support Services (31)	9884.74	0.05	8089.80	9879.63	9939.04	12110.04	1.92	1.69	30.74	182.30	11368.55
FTSE All-Share Industrial Transportation (8)	5563.16	-0.08	4552.96	5567.51	5605.82	7132.74	2.10	3.42	13.95	98.14	5828.72
FTSE All-Share Industrial Materials (1)	16703.12	1.21	519.33	16503.08	16303.04	21704.05	1.97	1.81	28.08	329.06	21098.53
FTSE All-Share Industrial Metals and Mining (9)	8093.58	1.01	6623.90	8012.29	7968.40	6396.77	6.45	2.01	7.71	517.27	12423.43
FTSE All-Share Precious Metals and Mining (5)	9935.57	-2.87	8131.40	10229.35	10080.14	21868.22	3.60	1.83	15.20	358.99	7004.92
FTSE All-Share Chemicals (7)	13433.95	-1.53	10994.53	13642.73	13679.74	18874.07	2.65	2.11	17.93	324.25	13464.12
FTSE All-Share Oil. Gas and Coal (12)	8313.16	0.22	6803.60	8294.71	8297.72	5953.67	3.51	2.74	10.38	292.72	10488.73
FTSE Sector Indices											
Non Financials (333)	**4965.01**	**-0.32**	**4429.44**	**4980.95**	**4935.45**	**5028.64**	**3.56**	**1.63**	**17.26**	**156.96**	**8964.19**

Hourly movements	8.00	9.00	10.00	11.00	12.00	13.00	14.00	15.00	16.00	High/day	Low/day
FTSE 100	7290.32	7275.83	7281.22	7289.30	7287.19	7289.00	7289.21	7283.79	7282.20	7307.53	7263.74
FTSE 250	18676.96	18591.87	18558.72	18588.62	18612.05	18588.53	18577.91	18565.63	18621.43	18687.66	18545.07
FTSE SmallCap	6016.39	6007.28	6002.83	6004.18	6009.71	6005.22	6001.15	5998.02	6001.62	6016.39	5997.90
FTSE All-Share	3992.48	3983.13	3984.49	3989.10	3988.96	3988.98	3988.69	3985.87	3986.83	3999.36	3976.58

Time of FTSE 100 Day's high:15:23:00 Day's Low09:19:45 FTSE 100 2010/11 High: 7672.40(10/02/2022) Low: 6826.15(12/10/2022)
Time of FTSE All-Share Day's high:15:23:00 Day's Low09:21:00 FTSE 100 2010/11 High: 4296.96(10/02/2022) Low: 3712.50(12/10/2022)

Further information is available on http://www.ftse.com © FTSE International Limited. 2013. All Rights reserved. "FTSE®" is a trade mark of the London Stock Exchange Group companies and is used by FTSE International Limited under licence. † Sector P/E ratios greater than 80 are not shown. For changes to FTSE Fledgling Index constituents please refer to www.ftse.com/indexchanges. ‡ Values are negative.

FT 30 INDEX

	Nov 15	Nov 14	Nov 11	Nov 10	Nov 09	Yr Ago	High	Low
FT 30	2483.50	2512.20	2488.80	2489.50	2428.20	0.00	2880.10	2152.10
FT 30 Div Yield	-	-	-	-	-	0.00	3.93	2.74
P/E Ratio net	-	-	-	-	-	0.00	19.44	14.26

FT 30 hourly changes

8	9	10	11	12	13	14	15	16	High	Low
2512.2	2500.4	2496.7	2495.3	2491.7	2491.6	2494.8	2486.2	2481.7	2512.2	2480.1

FT30 constituents and recent additions/deletions can be found at www.ft.com/ft30

FT WILSHIRE 5000 INDEX SERIES

	Nov 14		Nov 14
FT Wilshire 5000	40231.02	FT Wilshire Mid Cap	5468.37
FT Wilshire 2500	5150.16	FT Wilshire Small Cap	4951.15
FT Wilshire Mega Cap	5116.19	FT Wilshire Micro Cap	4862.10
FT Wilshire Large Cap	5174.82		

Source: Wilshire. Wilshire Advisors LLC (Wilshire) is an investment advisor registered with the SEC. Further information is available at https://www.wilshire.com/solutions/indexes . Wilshire® is a registered service mark. Copyright ©2022 Wilshire. All rights reserved.

FTSE SECTORS: LEADERS & LAGGARDS

Year to date percentage changes

Oil & Gas Producers	44.91	Gas Water & Multi	-4.98	Food Producers	-16.88
Oil & Gas	44.38	Consumer Goods	-5.40	Telecommunications	-16.94
Tobacco	19.61	Health Care Eq & Srv	-5.93	FTSE 250 Index	-17.14
Mining	17.52	Travel & Leisure	-8.05	Construct & Material	-18.05
Aerospace & Defense	9.74	Media	-9.11	Support Services	-18.20
Basic Materials	9.65	Tech Hardware & Eq	-9.24	Industrial Eng	-19.80
Pharmace & Biotech	6.72	Technology	-10.21	Leisure Goods	-21.18
Health Care	5.85	Software & Comp Serv	-10.32	Fixed Line Telecomms	-21.74
Banks	1.72	Nonlife Insurance	-10.45	Electronic & Elec Eq	-23.54
Personal Goods	1.13	Financial Services	-11.22	Household Goods & Ho	-26.86
Beverages	31.66	Beverages	-11.28	Chemicals	-27.04
FTSE 100 Index	-0.20	Financials	-11.75	Food & Drug Retailer	-29.37
Electricity	-0.60	Life Insurance	-13.96	Real Est Invest & Tr	-30.31
Oil Equipment & Serv	-1.34	Industrials	-14.70	General Retailers	-30.58
NON FINANCIALS Index	-2.10	Mobile Telecomms	-15.11	Real Est Invest & Se	-31.68
FTSE All{HY-}Share Index	-3.62	Consumer Services	-15.71	Industrial Transport	-38.16
Utilities	-3.88	Equity Invest Instr	-16.22	Automobiles & Parts	-61.75
		FTSE SmallCap Index	-16.55	Industrial Metals &	-79.33

FTSE 100 SUMMARY

FTSE 100	Closing Price	Day's Change	FTSE 100	Closing Price	Day's Change
3I Group PLC	1294.5	11.00	International Consolidated Airlines Group S.A.	139.18	-2.18
Admiral Group PLC	2073	-47.00	Intertek Group PLC	4121	27.00
Airtel Africa PLC	117.00	-2.00	Jd Sports Fashion PLC	119.75	0.15
Anglo American PLC	3344.5	25.50	Kingfisher PLC	246.00	-3.60
Antofagasta PLC	1400	-12.50	Land Securities Group PLC	616.00	-7.80
Ashtead Group PLC	5050	12.00	Legal & General Group PLC	246.30	-1.90
Associated British Foods PLC	1556	-6.00	Lloyds Banking Group PLC	43.72	0.11
Astrazeneca PLC	10800	-68.00	London Stock Exchange Group PLC	7986	-36.00
Auto Trader Group PLC	574.00	0.60	M&G PLC	189.85	-0.15
Aveva Group PLC	3180	4.00	Melrose Industries PLC	131.40	4.20
Aviva PLC	437.40	-3.40	Mondi PLC	1568.5	-3.00
B&M European Value Retail S.A.	392.50	-10.80	National Grid PLC	1003	-6.00
Bae Systems PLC	738.60	12.40	Natwest Group PLC	250.50	1.20
Barclays PLC	157.22	-0.40	Next PLC	5726	-52.00
Barratt Developments PLC	404.50	-3.20	Ocado Group PLC	770.20	-155.40
Berkeley Group Holdings (The) PLC	3777	-24.00	Pearson PLC	963.60	10.40
BP PLC	477.05	-3.45	Pershing Square Holdings LTD	2900	-45.00
British American Tobacco PLC	3228.5	-27.00	Persimmon PLC	1322.5	-12.50
British Land Company PLC	396.10	-2.20	Phoenix Group Holdings PLC	567.40	-1.40
Bt Group PLC	122.75	-2.20	Prudential PLC	1000.00	5.20
Bunzl PLC	2977	13.00	Reckitt Benckiser Group PLC	5672	4.00
Burberry Group PLC	2033	3.00	Relx PLC	2256	8.00
Centrica PLC	86.28	2.82	Rentokil Initial PLC	532.00	-1.60
Coca-Cola Hbc AG	2008	-14.00	Rightmove PLC	566.00	8.60
Compass Group PLC	1847.5	25.00	Rio Tinto PLC	5459	52.00
Convatec Group PLC	222.60	-1.60	Rolls-Royce Holdings PLC	91.11	-0.49
Crh PLC	3375.5	22.00	Rs Group PLC	959.00	5.00
Croda International PLC	7008	-66.00	Sage Group PLC	755.80	5.80
Dcc PLC	4521	34.00	Sainsbury (J) PLC	216.10	-4.10
Dechra Pharmaceuticals PLC	2880	-50.00	Schroders PLC	467.30	2.30
Diageo PLC	3614	-45.00	Scottish Mortgage Investment Trust PLC	833.80	25.20
Endeavour Mining PLC	1656	-50.00	Segro PLC	841.80	0.20
Entain PLC	1352	2.00	Severn Trent PLC	2688	-68.00
Experian PLC	2851	11.00	Shell PLC	2375	17.00
F&C Investment Trust PLC	926.00	-1.00	Smith & Nephew PLC	1060	-4.00
Flutter Entertainment PLC	11455	25.00	Smith (Ds) PLC	313.70	-3.50
Frasers Group PLC	789.00	-0.50	Smiths Group PLC	1600	8.00
Fresnillo PLC	857.80	-21.60	Smurfit Kappa Group PLC	3182	-41.00
Glaxosmithkline PLC	1354.2	-10.80	Spirax-Sarco Engineering PLC	11760	-125.00
Glencore PLC	519.50	7.50	Sse PLC	1643.5	11.50
Haleon PLC	279.10	-2.75	St. James's Place PLC	1198	0.50
Halma PLC	2370	-49.00	Standard Chartered PLC	576.80	-0.40
Harbour Energy PLC	345.70	3.10	Taylor Wimpey PLC	103.90	0.20
Hargreaves Lansdown PLC	909.60	-21.80	Tesco PLC	227.40	-3.00
Homeserve PLC	1188	-1.00	Unilever PLC	4033.5	1.00
HSBC Holdings PLC	480.00	-0.30	Unite Group PLC	955.00	7.00
Imperial Brands PLC	2027	-11.00	United Utilities Group PLC	1008	-22.00
Informa PLC	585.40	1.00	Vodafone Group PLC	95.89	-8.27
Intercontinental Hotels Group PLC	4771	12.00	Whitbread PLC	2548	-8.00
Intermediate Capital Group PLC	1219.5	-23.00	Wpp PLC	870.40	-8.20

FTSE GLOBAL EQUITY INDEX SERIES

Nov 15 Regions & countries	No of stocks	US $ indices	Day %	Mth %	YTD %	Total retn	YTD %	Gr Div Yield
FTSE Global All Cap	9520	690.59	-0.7	11.4	-18.5	1105.73	-16.8	2.3
FTSE Global All Cap	9520	690.59	-0.7	11.4	-18.5	1105.73	-16.8	2.3
FTSE Global Large Cap	1907	616.44	-0.5	10.9	-18.8	1017.42	-17.2	2.3
FTSE Global Mid Cap	2264	896.27	-1.0	13.1	-16.5	1349.80	-14.8	2.3
FTSE Global Small Cap	5349	925.78	-0.9	11.6	-19.1	1333.44	-17.7	2.1
FTSE All-World	4171	405.50	-0.6	11.3	-18.4	687.57	-16.8	2.3
FTSE World	2664	736.88	-0.7	11.8	-17.9	1676.67	-16.3	2.3
FTSE Global All Cap ex UNITED KINGDOM In	9229	729.92	-0.7	11.3	-18.6	1146.30	-17.0	2.2
FTSE Global All Cap ex USA	7709	483.39	-0.2	12.6	-19.4	858.75	-17.0	3.3
FTSE Global All Cap ex JAPAN	8115	721.59	-0.6	11.5	-18.4	1165.52	-16.8	2.3
FTSE Global All Cap ex Eurozone	8856	731.42	-0.7	10.7	-18.3	1145.60	-16.7	2.2
FTSE Developed	2180	676.80	-0.8	11.8	-18.0	1090.96	-16.4	2.1
FTSE Developed All Cap	5829	705.92	-0.8	11.8	-18.0	1121.09	-16.5	2.1
FTSE Developed Large Cap	834	633.81	-0.7	11.4	-18.2	1039.94	-16.7	2.2
FTSE Developed Europe Large Cap	220	371.82	0.2	16.2	-17.3	736.28	-14.7	3.2
FTSE Developed Europe Mid Cap	355	568.13	0.0	21.3	-26.3	976.20	-24.3	3.0
FTSE Dev Europe Small Cap	747	799.98	-0.3	20.8	-27.6	1320.68	-25.6	3.1
FTSE North America Large Cap	234	849.81	-0.8	10.2	-18.5	1275.79	-17.4	1.7
FTSE North America Mid Cap	423	1122.63	-1.4	12.4	-14.1	1557.94	-12.8	1.8
FTSE North America Small Cap	1334	1110.02	-1.3	10.9	-15.9	1477.25	-14.8	1.6
FTSE North America	657	557.61	-0.9	10.6	-17.7	855.79	-16.5	1.7
FTSE Developed ex North America	1523	256.72	-0.3	14.6	-18.6	491.22	-16.2	3.1
FTSE Japan Large Cap	169	364.62	-2.0	9.9	-20.0	536.00	-18.0	2.5
FTSE Japan Mid Cap	340	504.50	-2.0	6.2	-17.8	704.28	-15.7	2.6
FTSE Global wi JAPAN Small Cap	896	560.50	-2.3	6.8	-19.4	812.36	-17.2	2.8
FTSE Japan	509	149.58	-2.0	9.1	-19.6	246.20	-17.6	2.5
FTSE Asia Pacific Large Cap ex Japan	1088	651.36	0.6	9.8	-21.9	1186.53	-19.7	3.2
FTSE Asia Pacific Mid Cap ex Japan	868	938.65	0.9	11.5	-17.2	1648.45	-14.7	3.5
FTSE Asia Pacific Small Cap ex Japan	2114	529.58	0.7	10.0	-27.2	903.75	-25.3	3.1
FTSE Asia Pacific Ex Japan	1956	519.47	0.6	10.0	-21.4	1005.67	-19.2	3.3
FTSE Emerging All Cap	3691	687.10	0.7	7.1	-22.0	1196.86	-19.5	3.8
FTSE Emerging Large Cap	1073	631.39	0.6	6.9	-23.3	1105.92	-20.8	3.8
FTSE Emerging Mid Cap	918	1013.62	0.8	9.4	-11.8	1777.22	-8.8	4.0
FTSE Emerging Small Cap	1700	747.43	0.9	6.5	-22.9	1246.72	-20.4	3.4
FTSE Emerging Europe	111	114.20	1.0	20.6	-72.4	238.80	-71.3	2.9
FTSE Latin America All Cap	262	734.32	-0.2	5.0	3.6	1437.05	11.2	10.8
FTSE Middle East and Africa All Cap	330	765.65	-0.3	5.9	-3.9	1401.94	-1.1	3.2
FTSE Global wi UNITED KINGDOM All Cap In	291	305.22	0.5	13.3	-15.2	623.30	-12.3	3.6
FTSE Global wi USA All Cap	1811	957.84	-1.0	10.5	-17.8	1386.05	-16.7	1.6
FTSE Europe All Cap	1462	422.84	0.2	17.4	-21.0	803.78	-18.7	3.1
FTSE Eurozone All Cap	664	410.40	0.5	20.5	-20.8	774.23	-18.5	3.1
FTSE EDHEC-Risk Efficient All-World	4171	465.30	-0.7	12.0	-14.8	732.04	-12.9	2.7
FTSE EDHEC-Risk Efficient Developed Europe	575	311.36	0.2	19.0	-24.6	547.25	-22.5	3.2
Oil & Gas	131	425.73	-0.5	13.6	29.9	870.60	35.6	4.4
Oil & Gas Producers	87	425.47	-0.3	12.8	33.9	893.31	40.3	4.6

Nov 15 Sectors	No of stocks	US $ indices	Day %	Mth %	YTD %	Total retn	YTD %	Gr Div Yield
Oil Equipment & Services	24	287.24	-1.3	16.6	22.8	532.12	27.6	4.1
Basic Materials	394	604.32	0.4	16.7	-10.2	1112.08	-6.4	4.7
Chemicals	196	814.10	0.0	15.8	-16.0	1439.01	-13.7	3.0
Forestry & Paper	20	257.39	-0.8	8.2	-15.7	519.69	-12.9	3.8
Industrial Metals & Mining	98	495.74	1.0	20.8	-10.4	948.14	-5.8	7.5
Mining	80	944.16	0.8	16.9	1.4	1840.04	7.6	6.0
Industrials	803	494.30	-0.7	15.7	-17.7	788.19	-16.1	2.0
Construction & Materials	154	566.80	-0.9	15.8	-23.3	953.44	-21.7	2.2
Aerospace & Defense	35	847.90	-1.0	13.8	5.6	1321.46	6.9	1.5
General Industrials	76	238.66	-0.5	17.8	-14.0	421.53	-11.9	2.5
Electronic & Electrical Equipment	157	626.60	-0.8	17.7	-22.1	900.40	-20.9	1.5
Industrial Engineering	158	994.76	-0.5	20.6	-14.0	1580.99	-12.4	1.9
Industrial Transportation	133	919.15	-0.2	13.8	-17.2	1494.27	-14.7	3.4
Support Services	90	526.59	-0.8	11.4	-25.9	783.45	-24.9	1.5
Consumer Goods	569	544.68	-0.7	8.4	-21.0	915.15	-19.4	2.4
Automobiles & Parts	132	514.45	-1.6	6.0	-33.5	832.04	-32.4	2.0
Beverages	72	748.51	-0.6	6.5	-7.1	1269.42	-5.5	2.3
Food Producers	134	705.64	-0.1	7.4	-10.1	1215.68	-8.2	2.5
Household Goods & Home Construction	65	510.13	-0.3	11.9	-22.0	859.92	-20.0	2.8
Leisure Goods	53	234.02	-1.2	8.6	-26.5	330.91	-25.6	1.4
Personal Goods	98	883.65	-0.3	13.4	-23.5	1358.52	-22.3	1.9
Tobacco	15	950.83	-0.2	6.1	-1.1	2688.06	3.3	6.3
Health Care	343	709.10	0.0	8.1	-10.2	1129.59	-8.8	1.8
Health Care Equipment & Services	133	1350.38	-1.2	6.9	-18.8	1655.88	-18.2	1.0
Pharmaceuticals & Biotechnology	210	479.98	0.8	8.9	-3.4	822.05	-1.4	2.2
Consumer Services	427	524.89	-0.8	7.8	-25.5	749.16	-24.7	1.2
Food & Drug Retailers	69	315.41	0.3	10.7	-8.4	501.74	-6.3	2.4
General Retailers	141	920.28	-1.4	5.3	-28.0	1256.82	-27.5	1.0
Media	75	297.05	0.1	10.9	-36.7	426.92	-36.0	1.3
Travel & Leisure	142	443.33	-0.7	11.1	-13.6	646.93	-12.7	1.1
Telecommunication	89	130.96	-1.0	11.2	-11.7	308.34	-8.3	4.2
Fixed Line Telecommuniations	31	102.41	-0.2	13.7	-9.1	277.09	-4.9	5.1
Mobile Telecommunications	58	154.70	-1.5	9.8	-13.0	313.74	-10.1	3.8
Utilities	200	308.47	-0.6	10.0	-10.1	720.16	-7.6	3.4
Electricity	142	350.29	-1.0	9.0	-9.2	805.35	-6.7	3.3
Gas Water & Multiutilities	58	301.98	0.5	12.6	-12.4	729.71	-9.8	3.7
Financials	853	259.57	-0.8	12.9	-13.5	498.57	-11.0	3.2
Banks	270	198.74	-0.6	11.0	-12.2	425.57	-8.9	4.1
Nonlife Insurance	71	349.81	-0.5	11.9	-0.2	583.70	2.6	2.9
Life Insurance	51	214.10	0.4	12.5	-11.4	412.16	-8.1	4.0
Financial Services	211	434.07	-1.2	16.4	-13.0	658.84	-11.7	1.7
Technology	362	464.92	-0.8	11.2	-31.5	606.57	-30.9	1.1
Software & Computer Services	186	690.92	-1.1	6.6	-35.4	835.30	-35.1	0.7
Technology Hardware & Equipment	176	418.98	-0.5	16.3	-26.9	588.41	-25.9	1.5
Alternative Energy	20	185.12	-0.5	22.2	-11.2	265.63	-10.8	0.4
Real Estate Investment & Services	142	250.66	1.1	10.4	-23.8	488.25	-21.7	3.2
Real Estate Investment Trusts	108	439.90	-2.3	12.6	-26.2	1027.05	-24.2	3.9
FTSE Global Large Cap	1907	616.44	-0.5	10.9	-18.8	1017.42	-17.2	2.3

The FTSE Global Equity Series, launched in 2003, contains the FTSE Global Small Cap Indices and broader FTSE Global All Cap Indices (large/mid/small cap) as well as the enhanced FTSE All-World index Series (large/mid cap) - please see https://research.ftserussell.com/Products/indices/Home/indexfiltergeis?indexName=GEISAC&currency=USD&rtn=CAP&segment=global-developed–emerging. The trade names Fundamental Index® and RAFI® are registered trademarks and the patented and patent-pending proprietary intellectual property of Research Affiliates, LLC (US Patent Nos. 7,620,577; 7,747,502; 7,778,905; 7,792,719; Patent Pending Publ. Nos. US-2006-0149645-A1, US-2007-0055598-A1, US-2008-0288416-A1, US-2010- 0063942-A1, WO 2005/076812, WO 2007/078399 A2, WO 2008/118372, EPN 1733352, and HK1099110). "EDHEC™" is a trade mark of EDHEC Business School As of January 2nd 2006, FTSE is basing its sector indices on the Industrial Classification Benchmark - please see www.ftse.com/icb. For constituent changes and other information about FTSE, please see www.ftse.com. © FTSE International Limited. 2013. All Rights reserved. "FTSE®" is a trade mark of the London Stock Exchange Group companies and is used by FTSE International Limited under licence.

UK STOCK MARKET TRADING DATA

	Nov 15	Nov 14	Nov 11	Nov 10	Nov 09	Yr Ago
Order Book Turnover (m)	125.09	95.15	95.15	95.15	99.23	372.57
Order Book Bargains	834183.00	1027018.00	1027018.00	1027018.00	967596.00	685690.00
Order Book Shares Traded (m)	1319.00	2021.00	2021.00	2021.00	1614.00	1077.00
Total Equity Turnover (£m)	7566.62	5959.72	5959.72	5959.72	8466.44	9215.76
Total Mkt Bargains	1060806.00	1279254.00	1279254.00	1279254.00	1219137.00	882931.00
Total Shares Traded (m)	9905.00	6195.00	6195.00	6195.00	6371.00	7854.00

† Excluding intra-market and overseas turnover. *UK only total at 6pm. ‡ UK plus intra-market turnover. (u) Unavaliable. (c) Market closed.

All data provided by Morningstar unless otherwise noted. All elements listed are indicative and believed accurate at the time of publication. No offer is made by Morningstar or the FT. The FT does not warrant nor guarantee that the information is reliable or complete. The FT does not accept responsibility and will not be liable for any loss arising from the reliance on or use of the listed information.
For all queries e-mail ft.reader.enquiries@morningstar.com

Data provided by Morningstar | www.morningstar.co.uk

POWERED BY MORNINGSTAR

UK RIGHTS OFFERS

Issue price	Amount paid up	Latest renun. date	High	Low	Stock	closing Price p	+or-

There are currently no rights offers by any companies listed on the LSE.

UK COMPANY RESULTS

Company		Turnover		Pre-tax		EPS(p)		Div(p)		Pay day	Total	
Adept Technology Group	Int	**34.228**	34.275	**0.461L**	0.869L	**1.000L**	4.800L	**0.00000**	0.00000		**1.000**	0.000
Braemar	Int	**69.439**	47.410	**10.068**	4.817	**30.220**	22.340	**4.00000**	2.00000	Jan 4	**11.000**	7.000
Cropper (James)	Int	**61.583**	50.039	**0.857L**	1.913	**9.200L**	16.200	**2.00000**	2.50000	Jan 13	**9.500**	2.500
DX (Group)	Pre	**428.200**	382.100	**17.400**	10.600	**2.400**	2.700	**0.00000**	0.00000	-	**0.000**	0.000
Gear4music (Holdings)	Int	**66.305**	64.694	**1.043L**	1.930	**5.300L**	5.200	**0.00000**	0.00000	-	**0.000**	0.000
Imperial Brands	Pre	**32551.000**	32791.000	**2551.000**	3238.000	**165.900**	299.900	**49.32000**	48.48000	Mar 31	**70.590**	69.540
Land Securities Group	Int	**394.000**	315.000	**192.000L**	275.000	**25.700L**	37.200	**0.00000**	8.50000	-	**13.000**	17.500
Ninety One	Int	**384.300**	395.900	**110.600**	132.100	**9.400**	11.200	**6.50000**	6.90000	Dec 15	**14.200**	13.600
Speedy Hire	Int	**214.800**	188.600	**13.200**	14.300	**2.130**	1.810	**0.75000**	0.75000	Jan 20	**2.200**	2.150
Vodafone Group	Int	**22930.000**	22489.000	**1728.000**	1276.000	**0.035**	0.034	**0.00000**	4.50000	-	**0.300L**	
Wincanton	Int	**753.600**	690.300	**25.800**	25.100	**17.400**	16.900	**4.40000**	4.00000	Dec 30	**12.400**	11.500
Workspace Group	Int	**82.300**	61.200	**35.800**	3.400	**18.900**	1.900	**0.00000**	7.00000	-	**14.500**	24.750

Figures in £m. Earnings shown basic. Figures in light text are for corresponding period year earlier.
For more information on dividend payments visit www.ft.com/marketsdata

UK RECENT EQUITY ISSUES

Issue date	Issue price(p)	Sector	Stock code	Stock	Close price(p)	+/-	High	Low	Mkt Cap (£m)
11/09	250.00		ITH	Ithaca Energy PLC	210.00	-23.00	254.90	203.30	211084.1
10/31	4.00		BWN	Bowen Fintech PLC	6.25	0.25	6.00	5.90	343.8
10/27	10.00		UMR	Unicorn Mineral Resource PLC	18.50	0.30	19.50	10.00	513.5
10/24	1.00		ATN	Eastinco Mining and Exploration PLC	0.95	-0.05	1.00	0.90	916.5
10/21	55.00	AIM	SND	Sondrel (Holdings) PLC	58.80	-0.80	60.55	51.67	5142.8
10/07	10.00		ACG	ACG Acquisition Company Ltd	10.30	0.05	10.10	9.85	160.9

§Placing price. *Intoduction. ‡When issued. Annual report/prospectus available at www.ft.com/ir
For a full explanation of all the other symbols please refer to London Share Service notes.

MARKET DATA

FT500: THE WORLD'S LARGEST COMPANIES

Stock	Price	Day Chg	52 Week High	52 Week Low	Yld	P/E	MCap m
Australia (A$)							
ANZ Bank	24.23	-0.04	28.33	20.78	5.87	10.77	49085.55
BHP Group	43.94	-0.07	53.72	35.70	8.82	10.94	150712.75
CmwBkAu	106.48	1.38	108.39	86.98	3.10	21.24	122252.01
CSL	290.75	4.20	319.78	240.10	0.98	44.15	94995.2
NatAusBk	30.49	-0.77	33.75	25.43	2.78	17.22	65152.86
Telstra	3.88	0.02	4.20	3.62	2.43	33.47	30375.32
Wesfarmers	46.70	-0.12	61.34	40.03	3.59	25.46	35876.41
Westpac Bank	23.96	0.11	24.67	18.80	3.49	18.48	56837.48
Woolworths	33.78	-0.02	41.13	31.67	3.01	40.85	27842.18
Belgium (€)							
AnBshInBv	53.04	-0.27	58.72	45.56	0.97	27.46	95517.13
KBC Grp	51.76	0.64	81.70	45.53	6.40	8.73	22368.63
Brazil (R$)							
Ambev	15.95	-0.14	17.74	12.81	3.53	24.13	47236.63
Bradesco	13.10	0.10	17.72	12.69	6.32	6.07	11997.31
Cielo	5.11	-	6.22	2.01	2.84	17.32	2610.42
ItauHldFin	22.90	-	26.04	18.86	3.37	9.08	21350.05
Petrobras	31.55	0.85	42.08	26.76	15.17	4.51	44151.61
Vale	83.31	1.01	107.11	61.85	15.55	3.73	74860.97
Canada (C$)							
Bausch Hlth	9.67	0.17	36.26	5.10	-	-3.14	2631.82
BCE	62.36	-0.19	74.09	55.66	5.19	22.56	42771.31
BkMontrl	133.21	1.05	154.47	113.73	3.14	11.07	67855.51
BkNvaS	69.18	0.70	95.00	63.19	4.96	9.35	61988.07
Brookfield	61.21	0.52	79.04	51.07	0.99	21.93	74568.12
CanadPcR	99.91	-1.45	106.93	86.12	0.70	25.85	69892.6
CanImp	63.84	-0.39	167.50	55.35	8.70	4.78	43458.95
CanNatRs	82.27	1.21	88.18	48.42	2.24	13.77	68515.32
CanNatRy	160.83	-0.68	171.48	137.26	1.41	25.25	81907.47
Enbridge	53.87	0.42	59.69	46.88	5.73	20.30	82037.48
GtWesLif	32.12	0.60	41.50	27.99	5.56	9.75	22510.53
ImpOil	75.76	0.44	79.83	41.04	1.26	23.55	34843.88
Manulife	23.65	0.26	28.09	20.81	4.57	7.23	33586.26
Nutrien	104.89	1.32	147.93	84.37	2.05	16.27	41284.42
RylBkC	132.15	0.49	149.60	116.75	3.11	12.68	137773.71
SHOP	54.39	3.27	222.87	33.00	-	2.03	40827.29
Suncor En	48.92	0.70	53.62	28.77	1.98	19.10	49817.25
ThmReut	147.47	2.22	156.62	119.23	1.28	10.98	53336.99
TntoDom	88.06	0.16	109.08	77.27	3.43	11.92	120181.72
TrnCan	63.64	0.53	74.44	54.60	5.06	37.01	48436.36
China (HK$)							
AgricBkCh	2.47	0.04	3.15	2.22	8.43	3.31	9705.48
Bk China	2.69	0.04	3.20	2.51	8.08	3.40	28754.36
BkofComm	4.31	0.06	5.74	3.84	7.93	3.63	19289.79
BOE Tech	0.68	0.03	0.86	0.57	-	11.19	17.29
Ch Coms Cons	3.40	0.07	5.17	3.09	5.85	2.88	1920.36
Ch Evrbrght	2.29	0.03	3.11	2.04	10.22	3.16	3711.45
Ch Rail Cons	4.22	0.06	5.95	3.75	6.07	2.29	1120.04
Ch Rail Gp	3.90	0.04	5.88	3.48	5.15	3.20	2097.55
ChConstBk	4.65	0.09	6.23	4.12	7.80	3.45	142906.46
China Vanke	14.18	0.34	21.70	9.96	9.81	6.52	3455.8
ChinaCitic	3.28	0.04	4.08	2.92	8.36	3.10	6239.79
ChinaLife	10.80	0.28	15.04	8.53	6.18	4.82	10272.99
ChinaMBank	36.90	0.95	70.80	25.40	3.78	6.94	21654.91
ChinaMob	49.30	0.35	58.65	45.90	6.38	7.76	128939.5
ChinaPcIns	16.56	0.48	25.90	12.10	7.75	5.51	5874.92
ChMinsheng	2.56	0.04	3.29	2.19	9.38	3.38	2722.73
ChMrchSecs	13.58	0.33	18.56	12.06	3.22	12.10	14329.29
Chna Utd Coms	3.54	0.08	4.08	3.30	3.17	17.73	15582.76
ChShenEgy	22.45	0.05	27.65	15.98	8.92	6.95	9692.63
ChShpbldng	3.60	0.03	4.33	3.36	-	-267.20	11302.71
ChStConEng	5.32	0.03	6.40	4.63	4.04	4.12	30885.42
ChUncHK	3.65	0.10	4.43	3.27	4.21	8.20	14276.47
CNNC Intl	6.18	0.10	8.92	5.78	2.02	16.13	16561.96
CSR	2.92	0.07	3.80	2.37	6.92	8.19	1631.54
Daqin	6.53	-0.12	7.25	5.95	7.36	9.87	13801.88
GuosenSec	9.22	0.21	11.70	8.43	2.50	10.58	11570.5
HaitongSecs	4.67	0.18	7.34	3.77	6.02	5.17	2035.41
Hngzh HikVDT	31.78	1.19	55.55	28.10	2.52	17.44	41456.79
Hunng Pwr	3.28	-0.01	5.74	2.62	5.89	-3.76	1970.78
IM Baotou Stl	1.98	-	3.21	1.75	-	33.66	8916.82
In&CmBkCh	3.77	0.08	4.94	3.37	7.87	3.52	41827.79
IndstrlBk	16.70	0.03	23.22	15.01	4.66	4.57	49322.63
Kweichow	1588	55.00	2216.96	1359	1.22	35.71	283604.03
Midea	0.37	0.01	0.61	0.35	-	-4.10	14.24
New Ch Life Ins	16.58	0.52	24.70	12.04	9.03	3.21	2191.71
PetroChina	3.39	0.03	4.49	3.01	6.88	6.98	9143
PingAnIns	44.15	2.25	69.40	31.30	5.55	7.16	42031.82
PngAnBnk	12.01	0.06	19.06	10.39	1.45	7.16	33134
Pwr Cons Corp	7.26	0.07	9.81	5.99	1.23	15.07	11344.67
SaicMtr	14.58	0.19	22.14	13.77	4.08	7.28	24217.71
ShenwanHong	0.09	0.00	0.18	0.05	-	2.78	103.59
ShgPdgBk	7.06	0.03	8.81	6.64	6.53	4.51	29461.07
Sinopec Corp	3.44	0.03	4.28	3.06	3.96	4.23	11195.1
Sinopec Oil	1.95	0.01	2.37	1.70	-	647.28	3761.84
Denmark (kr)							
DanskeBk	119.30	0.60	133.25	91.28	1.62	8.48	14334.7
MollerMrsk	15315	-110.00	24070	13185	2.14	2.59	17870.29
NovoB	812.10	-13.90	864.40	604.40	1.11	40.63	197217.78
Finland (€)							
Nokia	4.67	0.07	5.71	4.12	-	16.72	27588.19
SampoA	46.83	0.47	48.74	35.85	3.52	10.34	25878.05
France (€)							
Airbus Grpe	114.38	1.52	120.36	86.52	-	21.75	93458.65
AirLiquide	137.16	0.08	153.40	114.48	1.93	26.26	74420.21
AXA	26.63	-0.07	29.09	20.34	5.17	9.31	64503.04
BNP Parib	52.47	0.29	68.07	40.67	4.92	7.84	67138.73
ChristianDior	691.00	5.00	733.50	513.00	0.98	26.17	129301.5
Cred Agr	9.64	0.02	14.27	8.09	7.99	5.47	30417.73
Danone	49.86	-0.37	58.24	46.48	3.75	17.60	34928.63
EDF	11.91	-0.01	12.49	6.64	3.95	9.51	47985.48
Engie SA	14.36	0.12	14.61	9.79	3.56	10.50	36252.21
EssilorLuxottica	170.95	0.70	195.00	132.70	0.61	54.09	79289.86
Hermes Intl	1455	6.50	1678	957.60	0.30	64.81	159232.36
LOreal	342.75	-3.75	433.65	300.45	1.12	43.33	190705.45
LVMH	704.20	3.50	741.60	535.00	0.96	30.59	367380.73
Orange	9.76	0.01	11.94	8.93	5.92	3361.08	26910.78
PernodRic	184.50	-3.75	214.50	166.60	1.63	28.90	49335.29
Renault	33.27	0.51	38.07	20.47	-	-25.78	10199.22
Safran	111.70	2.36	122.92	87.85	0.37	1159.24	49471.87
Sanofi	84.63	0.54	106.08	76.45	3.64	17.75	111198.46
Sant Gbn	45.12	-0.28	64.82	35.20	2.90	11.20	24121.06
Schneider	140.98	-0.16	173.78	110.02	1.78	25.80	83463.1
SocGen	24.41	0.25	37.68	18.34	2.19	4.28	21501.49
Total	57.78	0.86	58.43	40.09	4.50	11.52	156879.08
UnibailR	54.57	-0.26	73.09	39.68	-	-8.07	7849.6
Vinci	95.24	0.10	103.74	80.74	2.72	21.92	59039.35
Vivendi	8.74	0.07	12.16	7.59	6.62	-16.19	10039.28
Germany (€)							
Allianz	200.15	-1.85	232.50	156.22	4.62	13.12	84748.71
BASF	50.30	-0.98	69.15	37.90	6.32	8.64	47892.47
Bayer	53.42	2.10	67.99	43.91	3.61	54.35	54404.29
BMW	85.18	0.15	97.60	67.58	2.15	4.71	53157.05
Continental	60.56	-1.20	111.96	44.44	-	9.68	12556.23
Deut Bank	10.32	0.14	14.64	7.46	-	10.53	22102.13
Deut Tlkm	18.96	0.08	19.77	14.47	3.05	22.62	98018.17
DeutsPost	39.06	-0.29	58.31	29.68	3.41	10.26	50164.79
E.ON	8.96	0.05	12.54	7.28	5.05	5.17	24544.43
Fresenius Med	30.17	0.20	63.66	26.19	4.28	9.46	9163.88
Fresenius SE	24.19	0.03	38.24	19.76	3.59	7.94	14005.25
HenkelKgaA	62.85	-0.15	74.75	56.55	2.81	17.35	16926.52
Linde	323.80	-0.05	329.15	244.00	1.11	52.21	165946.3
Mercedes-Benz	65.19	0.25	77.90	50.19	2.00	6.77	72298.45
MuenchRkv	289.40	0.40	291.40	205.15	3.26	14.35	42030.41
SAP	106.90	1.18	126.48	81.35	1.67	24.87	136139.63
Siemens	123.12	0.26	156.98	93.67	2.74	19.21	108487.01
Volkswgn	190.95	-0.40	286.40	158.80	2.42	6.70	58412.27
Hong Kong (HK$)							
AIA	75.80	0.10	92.50	57.25	1.55	19.74	114567.39
BOC Hold	25.15	0.85	32.75	23.20	4.35	13.13	33990.64
Ch OSLnd&Inv	20.30	0.25	27.35	14.58	5.22	5.13	28401.43
ChngKng	47.10	-0.30	57.00	42.90	3.32	10.97	21706.09
Citic Ltd	8.00	0.32	9.26	6.96	5.93	3.77	29748.87
Citic Secs	15.30	0.26	21.32	11.82	2.75	8.02	5124.35
CK Hutchison	44.15	1.75	60.45	38.80	4.55	5.69	21640.64
CNOOC	10.48	0.16	12.54	7.55	3.80	9.31	59717.71
HangSeng	125.90	2.30	169.50	110.00	4.27	20.61	30768.78
HK Exc&Clr	309.20	17.40	483.60	208.20	2.61	35.47	50111.23
MTR	37.45	0.55	43.70	33.45	2.89	27.59	29690.69
SandsCh	19.88	1.14	24.90	12.50	-	-22.34	20566.9
SHK Props	92.65	0.75	101.70	83.10	4.71	10.77	34319.65
Tencent	288.00	27.40	509.00	198.60	0.49	11.53	352732.37
India (Rs)							
Bhartiartl	835.25	13.35	841.45	628.75	-	186.31	61330.3
HDFC Bk	1619	3.95	1722.1	1271.6	-	28.68	111268.06
Hind Unilevr	2457.5	-0.30	2734	1927	1.25	68.78	71190.95
HsngDevFin	2675.5	13.95	2999.25	2026	0.82	23.79	59948.47
ICICI Bk	911.70	16.75	943.25	642.15	0.21	30.22	78365.7
Infosys	1594	8.70	1923.3	1360	1.82	32.90	82696.16
ITC	345.25	-1.95	361.45	207.00	2.98	29.97	52799.54
L&T	1996.55	-3.25	2056	1456.35	0.86	34.60	34587.88
OilNatGas	142.35	3.10	189.80	119.85	6.13	4.21	22079.4
RelianceIn	2607.3	-11.75	2856.15	2222	0.26	31.17	217501.2
SBI NewA	600.85	8.30	622.70	430.70	0.64	17.51	66114.15
SunPhrmInds	1016.05	-0.85	1070.95	733.70	0.71	39.56	30056.96
Tata Cons	3332.6	-2.90	3920	2950.1	1.04	33.25	150345.59
Israel (ILS)							
TevaPha	32.12	-0.88	37.23	23.83	-	28.43	10391.96
Italy (€)							
Enel	5.11	0.03	7.25	3.96	6.91	24.67	53855.55
ENI	14.48	0.00	14.85	10.43	4.49	6.32	54107.29
Generali	17.11	0.03	21.55	13.67	8.28	9.97	28035.24
IntSPaolo	2.19	0.00	2.92	1.58	1.61	70.44	44112.01
Unicred	13.05	0.18	15.93	7.75	0.89	20.11	30275.45
Japan (¥)							
AstellasPh	2100.5	52.50	2205	1739	2.33	30.50	27694.67
Bridgestne	5388	29.00	5509	4042	3.27	11.82	27617.11
Canon	3131	2.00	3516	2467	3.31	14.61	29991.47
CntJpRwy	16195	10.00	17920	14660	0.85	-29.29	23959.85
Denso	7675	127.00	9575	6549	1.94	20.28	43432.04
EastJpRwy	7683	-14.00	8280	6373	1.38	-7.43	20853.6
Fanuc	20970	325.00	25300	18740	2.29	24.06	30408.22
FastRetail	83050	-400.00	88230	54310	0.67	37.60	63267.86
Fuji Hvy Ind	2316	14.50	2684	1664.5	2.57	25.66	12793.82
Hitachi	7227	52.00	7460	4750	1.69	10.22	50271.97
HondaMtr	3331	30.00	3755	3043	4.11	6.80	43334.3
JapanTob	2745	2.50	2824	2000	5.29	13.48	39428.32
KDDI	4046	-114.00	4636	3237	3.15	13.07	66911.62
Keyence	60040	-300.00	74710	44880	0.35	48.39	104870.65
MitsbCp	4319	22.00	4845	3383	3.39	9.29	45725.62
MitsubEst	997.98	3.15	1001.25	876.51	-	-	-
MitsubishiEle	1372.5	23.50	1547	1225.5	3.10	11.83	21165.14
MitsuiFud	949.37	20.54	958.56	684.38	-	-	-
MitUFJFin	722.50	19.20	828.30	601.40	3.82	7.06	68918.68
Mizuho Fin	1615.5	18.00	1683.5	1397	5.13	7.45	29461.06
Murata Mfg	7787	41.00	9410	6604	1.64	15.08	37793.61
Nippon T&T	3758	-22.00	4128	3054	2.97	11.41	97755.84
NipponTT	3758	-22.00	4128	3054	2.97	11.41	97755.84
Nissan Mt	500.60	7.70	654.30	436.50	-	15.33	15174.44
Nomura	498.90	3.80	562.20	460.30	4.90	-32.35	11585.92
Nppn Stl	2209.5	60.50	2318.5	1690.5	3.85	3.29	15079.97
Panasonic	1204.5	-10.00	1408	1006.5	2.20	11.48	21228.89
Seven & I	5537	113.00	6083	4552	1.97	19.87	35250.14
ShnEtsuCh	17335	15.00	20480	14185	1.78	15.66	51161.6
Softbank	6147	79.00	7217	4210	0.76	4.98	76062.89
Sony	11590	-5.00	14745	9213	0.55	13.96	104969.4
SumitomoF	4468	179.00	4484	3672	4.75	8.20	44111.75
Takeda Ph	3839	49.00	4063	2993	4.98	12.99	43625.44
TokioMarine	2767	-20.50	2848	1886	8.44	4.24	40539.21
Toyota	1998	12.00	2375.5	1805	2.71	8.50	234108.98
Mexico (Mex$)							
AmerMvl	19.67	0.01	21.44	15.66	1.65	15.97	43119.99
FEMSA UBD	151.14	3.04	169.96	120.63	1.34	124.05	16856.91
WalMrtMex	71.71	-0.41	82.93	64.81	0.70	35.87	64619.94
Netherlands (€)							
ASML Hld	579.30	14.00	777.50	376.10	0.56	46.41	244099.58
Heineken	86.56	0.30	100.95	77.50	1.09	15.57	51685.88
ING	11.29	0.08	14.00	7.90	5.12	9.53	44091.3
Unilever	46.19	0.41	48.81	39.36	3.10	23.71	139329.69
Norway (Kr)							
DNB	183.20	-2.95	220.50	168.05	9.44	11.78	28641.21
Equinor	356.65	2.65	410.95	217.70	1.37	15.48	113546.08
Telenor	97.68	-0.58	148.80	88.54	9.15	16.61	13705.27
Qatar (QR)							
QatarNtBk	19.66	-0.34	27.00	18.40	2.53	16.12	49862.86
Saudi Arabia (SR)							
AlRajhiBnk	84.00	-	117.40	78.60	2.48	16.42	89395
Natnlcombnk	54.80	-1.70	82.00	54.20	2.29	21.20	65288.79
SaudiBasic	84.80	0.20	141.40	83.00	3.32	12.72	67684.77
SaudiTelec	38.30	0.05	48.88	37.10	9.06	7.80	50949.8
Singapore (S$)							
DBS	35.18	0.32	37.49	29.45	3.12	15.26	66091.92
JardnMt US$	49.30	0.50	62.10	42.60	3.06	9.34	14303.11
OCBC	12.47	0.15	13.54	10.98	3.00	13.16	40905.94
SingTel	2.78	0.02	2.88	2.31	2.40	49.64	33498.9
UOB	30.00	0.05	33.33	25.47	2.95	14.12	36672.95
South Africa (R)							
Firstrand	64.50	-1.80	79.34	53.25	3.88	12.11	20948.8
MTN Grp	132.82	0.23	211.49	115.46	-	18.78	14490.49
Naspers N	2463.29	114.40	2853.25	1392.5	0.23	13.74	62114.21
South Korea (KRW)							
HyundMobis	220500	1500	265500	189500	1.77	8.83	15778.59
KoreaElePwr	19350	-50.00	25100	16500	6.17	-11.61	9427.75
SK Hynix	91600	700.00	134000	80400	1.64	6.73	50610.97
SmsungEl	62400	500.00	80800	51800	2.25	11.09	282721.92
Spain (€)							
BBVA	5.41	0.04	6.12	3.97	6.61	7.64	33824.67
BcoSantdr	2.61	0.04	3.48	2.32	2.83	5.42	45413.57
CaixaBnk	3.23	0.07	3.64	2.22	0.80	22.05	27006.71
Iberdrola	10.48	-0.02	11.49	8.47	3.88	18.65	69085.09
Inditex	24.43	0.08	32.24	18.55	0.87	26.74	78929.99
Repsol	14.04	0.19	16.23	9.60	4.12	8.88	21131.37
Telefonica	3.55	-0.07	5.06	3.24	9.40	2.69	21223.48
Sweden (SKr)							
AtlasCpcoB	117.00	-2.06	133.60	22.08	6.32	7.78	17501.46
Ericsson	64.78	0.53	117.32	58.81	3.51	9.51	19073.83
H & M	124.86	0.54	191.86	98.25	5.10	17.14	17478.17
Investor	191.76	-0.38	228.75	158.22	1.85	8.22	33482
Nordea Bk	106.52	1.08	113.78	85.25	13.89	12.38	38133.35
SEB	118.55	0.35	139.50	91.64	8.62	9.87	24478.34
SvnskaHn	105.50	1.25	105.90	80.88	4.79	10.31	19662.67
Swedbank	165.00	0.90	195.30	124.50	8.93	8.78	17899.99
Telia Co	29.29	-0.37	41.70	27.93	6.91	10.30	11479.51
Volvo	191.08	-1.04	218.65	148.24	3.44	12.40	29087.92
Switzerland (SFr)							
ABB	29.78	-0.02	33.86	23.84	2.55	14.90	61908.9
CredSuisse	4.28	-0.01	9.59	3.52	2.13	-7.01	12009.85
Nestle	107.76	-0.32	128.90	103.42	2.33	19.52	313554.12
Novartis	79.66	0.86	88.42	73.01	3.45	9.03	202603.37
Richemont	116.70	-0.25	146.10	90.28	1.53	29.03	64456.04
Roche	314.75	2.10	404.20	298.60	2.55	22.00	233976.94
Swiss Re	79.82	-0.84	102.20	68.18	6.75	20.12	26814.77
Swisscom	492.70	-1.70	587.40	443.40	4.07	15.29	27005.41
UBS	17.51	0.17	19.90	13.10	1.80	9.40	65282.77
Zurich Fin	424.60	-2.00	461.70	376.00	4.30	14.76	67596.43
Taiwan (NT$)							
Chunghwa Telecom	109.00	-0.50	132.50	105.50	3.87	24.10	27234.46
Formosa PetChem	85.90	0.80	103.50	75.20	0.68	16.80	26355.76
HonHaiPrc	101.50	-	116.00	99.50	3.88	10.39	45320.61
MediaTek	722.00	25.00	1200	533.00	5.05	10.43	37190.81
TaiwanSem	480.00	35.00	650.00	370.00	2.19	19.40	400888.34
Thailand (THB)							
PTT Explor	33.50	-0.50	41.25	32.75	5.64	9.45	26904.63
United Arab Emirates (Dhs)							
Emirtestele	24.30	0.70	38.98	11.60	2.75	27.17	57535.64
United Kingdom (p)							
Anglo American	3344.5	25.50	4292.5	2487.5	5.33	6.62	55888.83
AscBrFd	1556	-6.00	2063	1223	0.40	25.72	14655.23
AstraZen	10800	-68.00	11540	8090.32	1.92	1828.65	162722.59
Aviva	437.40	-3.40	606.58	341.92	4.88	57.55	20883.86
Barclays	157.22	-0.40	209.45	132.06	1.91	3.82	31916.75
BP	477.05	-3.45	503.30	310.53	3.30	17.31	113115.44
BrAmTob	3228.5	-27.00	3645	2514	6.68	10.92	71612.36
BT	122.75	-2.20	201.40	113.80	-	11.92	14489.45
Compass	1847.5	25.00	1970.5	1435	0.76	44.95	36147.52
Diageo	3614	-45.00	4097	3282.5	2.01	27.80	108239.23
GlaxoSmh	1354.2	-10.80	2753.96	1280.92	5.91	15.64	79230.98
Glencore	519.50	7.50	548.30	346.40	1.71	19.02	89151.82
HSBC	480.00	-0.30	567.20	409.85	3.37	10.49	114497.28
Imperial Brands	2027	-11.00	2164	1434.23	6.81	6.78	22999.52
Jardine Mathes.	62.50	-	60.50	47.52	2.42	11.84	18132.75
LlydsBkg	43.72	0.11	56.00	38.10	5.88	6.07	37482.27
LSE Group	7986	-36.00	8612	6230	0.96	81.66	32873.19
Natl Grid	1003	-6.00	1271.45	844.29	4.90	23.38	40052.79
Natwest Group	250.50	1.20	284.42	196.92	4.19	9.86	35660.92
Prudential	1000.00	5.20	1508	782.40	1.18	16.24	30780.84
ReckittB	5672	4.00	6824	5400	3.08	-24.54	47519.49
RELX	2256	8.00	2634.82	2056	2.11	29.76	51427.04
RioTinto	5459	52.00	6343	4354	9.20	5.71	87106.12
RollsRoyce	91.11	-0.49	161.91	64.44	-	61.98	2015.94
Shell PLC	2375	17.00	2527	1534.2	2.55	12.52	129893.5
StandCh	576.80	-0.40	641.00	406.20	1.54	12.93	22623.08
Tesco	227.40	-3.00	304.10	194.35	4.02	11.58	22150.8
Unilever	4033.5	1.00	4178	3267.5	3.59	20.71	59108.12
Vodafone	95.89	-8.27	141.60	94.61	8.07	-214.52	30429.48
WPP	870.40	-8.20	1231.5	713.00	3.04	16.58	13110.73
United States of America ($)							
21stC Fox A	31.12	0.71	44.95	28.02	1.33	14.34	9411.5
3M	131.36	0.33	185.04	107.07	3.96	14.78	72608.31
AbbottLb	103.49	1.48	142.60	93.25	1.53	29.90	180442.45
Abbvie	152.14	0.40	175.91	115.01	3.00	26.85	269056.62
Accenture	295.78	6.87	417.37	242.95	1.10	34.19	196628.9
Activision Bli.	73.85	-0.11	82.00	56.40	0.56	24.44	57796.88
Adobe	348.68	8.31	699.54	274.73	-	39.05	162101.33
Advanced Micro	77.40	3.87	164.46	54.57	-	34.29	124797.66
AEP	89.14	0.48	105.60	80.22	2.96	20.46	45805.81
Aflac	70.50	2.19	70.79	52.07	1.64	12.56	43835.47
AirProd	296.39	1.50	308.63	216.24	1.78	35.44	65739
Allstate	131.79	2.75	144.46	106.11	2.16	8.84	34951.97
Alphabet	99.73	4.03	151.55	83.34	-	1.01	595687.29
Altria	43.69	-0.27	57.05	40.35	7.08	37.12	78300.02
Amazon	100.80	2.31	188.11	85.87	-	1.77	1028326.74
AmerAir	14.92	0.24	21.42	11.65	-	-4.54	9696.52
AmerExpr	154.90	0.77	199.55	130.65	1.06	17.13	115746.34
AmerIntGrp	61.37	1.13	65.73	47.05	1.83	6.46	45596.68
AmerTower	217.98	2.60	291.99	178.17	2.10	43.85	101492.71
Amgen	283.26	-1.76	296.67	198.64	2.18	31.37	151141.65
Amphenol Corp	79.89	1.22	88.45	61.67	0.86	36.24	47542.1
Analog Devices	165.55	4.29	191.95	133.48	1.48	63.29	85149.24
Anthem	482.58	12.71	-	-	-	-	-
Aon Cp	294.59	3.27	341.98	246.21	0.59	60.43	60936.81
Apple	152.73	4.45	182.13	129.04	0.50	28.83	2429567.32
Applied Materi.	111.17	3.56	167.06	71.12	0.75	17.46	95640.59
Aptiv	113.63	4.00	179.40	77.96	-	66.68	30787.73
ArcherDan	93.78	-0.10	98.88	61.80	1.39	22.29	51516.56
AT&T	19.16	0.10	21.53	14.46	9.54	7.90	136517.69
Autodesk	231.02	7.71	335.48	163.20	-	116.30	49866.68
AutomData	254.72	4.64	261.59	192.26	1.32	44.89	105664.93
AutoZone	2437.81	-9.07	2560.01	1703.32	-	25.08	46273.11
Avago Tech	527.65	14.43	677.76	415.07	2.50	33.92	213696.99
BakerHu	30.76	0.51	39.78	20.42	2.11	81.05	30805.14
Bank of NY	43.92	0.34	64.63	36.22	2.60	12.08	35499.66
BankAm	37.95	0.19	50.11	29.31	1.81	12.10	304411.19
Baxter	54.44	0.76	89.70	49.83	1.75	24.50	27444.33
BectonDick	224.21	0.05	277.29	215.90	1.32	44.16	63942.17
BerkshHat	471445.53	4845.53	544389.26	393012.25	-	9.03	281370.95
Biogen	303.06	4.00	305.48	187.16	-	33.18	43641.07
BlackRock	748.30	7.15	971.50	503.12	1.94	22.29	112391.35
Boeing	175.65	2.10	233.94	113.02	-	-27.97	104302.93
Booking Holdings	2053.18	73.93	2715.66	1616.85	-	82.98	79641.6
Bristol-Myers	75.89	-0.51	81.17	53.22	2.33	27.69	161343.68
Broadcom	527.65	14.43	677.76	415.07	2.50	33.92	213696.99
Cadence Design	170.45	2.52	194.97	132.32	-	77.62	46757.16
CapOne	105.40	-6.17	160.54	90.27	1.67	4.45	40231.41
CardinalHlth	74.80	-0.41	81.57	45.85	2.30	44.12	19607.63
Carnival	11.31	0.71	23.86	6.11	-	-1.53	12584.71
Caterpillar	235.17	-1.33	239.85	160.60	1.60	22.63	122384.67
Centene Corp	82.30	0.26	98.53	69.51	-	41.09	46603.17
CharlesSch	78.81	2.34	96.24	59.35	0.80	31.70	143106.8
Charter Comms	400.93	13.12	703.65	297.66	-	18.65	62412.91
Chevron Corp	185.87	-0.68	189.68	110.73	2.51	26.00	359405.4
Chipotle Mexic.	1544.28	31.16	1895.99	1196.28	-	76.77	42809.16
Chubb	205.65	0.55	218.99	173.78	1.36	12.15	85355.09
Cigna	308.01	1.16	331.05	191.74	1.14	22.29	94170.67
Cintas Corp	449.96	6.08	461.44	343.86	0.71	44.91	45691.33
Cisco	45.20	0.46	64.29	38.61	2.90	18.27	185699.21
Citigroup	49.64	0.62	69.67	40.01	3.61	5.57	96145.38
CME Grp	174.10	0.20	256.94	166.58	1.82	27.19	62628.12
Coca-Cola	60.74	0.01	67.20	52.28	2.43	30.73	262670.94
Cognizant	59.37	1.29	93.47	51.33	1.42	16.69	30511.52
ColgtPlm	75.60	1.03	85.18	67.84	2.08	33.75	63142.19
Comcast	34.88	0.75	53.79	28.39	2.52	13.06	150449.51
ConocPhil	132.52	-0.51	138.49	66.06	1.29	24.86	165129.34
Constellation	243.18	-1.29	261.53	207.59	1.11	-1246.57	39205.77
Corning	34.39	0.40	43.47	28.98	2.45	30.58	29083.22
Corteva	65.84	-0.89	68.43	43.74	0.71	31.62	47042.15
Corteva	65.84	-0.89	68.43	43.74	0.71	31.62	47042.15
Costco	529.49	19.81	612.27	406.51	0.53	48.12	234354.47
CrownCstl	137.04	1.93	208.69	121.71	3.50	58.43	59344.9
CSX	31.85	0.05	38.63	25.80	1.08	20.03	66961.72
CVS	98.58	1.41	111.25	86.28	1.78	18.86	129530.86
Danaher	272.81	6.09	331.69	233.71	0.29	35.44	198595.5
Deere	407.65	0.71	446.76	283.81	0.85	25.48	123036.77
Delta	35.16	0.47	46.27	27.20	-	48.03	22540.98
Devon Energy	72.63	1.13	79.40	35.55	2.38	19.73	47478.23
Digital Realty	110.91	3.49	176.53	85.76	3.67	21.26	31887.66
DiscFinServ	105.82	-0.11	129.12	87.64	1.56	6.76	28912.75
Disney	95.77	1.49	160.72	86.28	-	63.39	174594.24
Dollar General	256.93	10.00	262.21	183.25	0.58	28.49	57956.14
DominRes	58.62	0.66	88.78	57.95	3.78	20.92	48849.01
DukeEner	96.71	1.26	116.33	83.76	3.54	22.33	74472.77
DuPont	70.61	0.04	84.08	49.52	1.49	24.89	35075.78
Eaton	163.52	1.87	175.72	122.50	1.63	34.86	65031.9
eBay	47.11	1.20	76.58	35.92	1.34	141.14	25564.67
Ecolab	154.60	1.71	238.93	131.04	1.11	45.02	44034.42
Edwards Lifesc.	75.60	2.09	131.73	67.13	-	36.16	46737.4
Eli Lilly	351.10	-4.96	369.80	231.87	0.85	65.31	333609.27
Emerson	96.78	1.99	100.00	72.41	1.84	24.06	57226.01
EOG Res	145.46	-0.73	150.88	80.67	0.97	20.73	85438.74
Equinix	653.06	14.12	847.10	494.89	1.54	134.45	60432.94
EquityResTP	62.27	0.70	94.32	59.32	3.40	20.69	23533.01
Exelon	38.31	0.25	50.71	29.10	3.51	25.07	38070.26
ExxonMb	113.19	-0.18	114.66	57.96	2.71	23.91	466149.63
Fedex	178.53	3.77	260.50	141.92	1.41	10.93	46457.04
Fidelity NIS	64.37	-0.15	122.06	56.53	2.13	109.38	38195.84
Fiserv	101.41	1.40	110.94	87.03	-	58.02	64398.2
FordMtr	14.53	0.47	25.87	10.61	0.60	3.72	57368.55
Franklin	27.27	0.81	36.20	20.24	3.64	8.21	13590.2
GenDyn	245.10	2.28	254.99	188.64	1.67	24.16	67291.95
GenElectric	87.52	1.69	108.67	59.93	0.32	-30.66	95630.32
GenMills	76.89	-0.09	82.10	61.41	2.35	23.12	45633.99
GenMotors	41.30	1.37	67.21	30.33	-	7.02	58668.24
GileadSci	83.18	0.33	84.14	57.17	3.00	19.21	104328
GoldmSchs	386.59	4.23	407.48	277.84	1.48	7.40	130912.75
Halliburton	38.17	0.12	43.99	20.77	0.60	24.42	34660.15
HCA Hold	227.65	5.03	279.02	164.47	0.74	12.25	64360.46
Hew-Pack	30.90	0.47	41.47	24.08	2.39	6.35	31078.48
Hilton Worldwi.	140.96	2.20	167.99	108.41	-	109.92	38123.48
HiltonWwde	140.96	2.20	167.99	108.41	-	109.92	38123.48
HomeDep	314.49	7.57	420.61	264.51	1.86	22.84	321951.01
Honywell	214.92	1.92	224.04	166.63	1.54	30.93	144495.49
HumanaInc	519.16	-10.84	571.30	363.73	0.47	26.07	65725.25
IBM	144.82	0.62	146.16	114.56	3.97	31.65	130935.58
IDEXX Laborato.	437.26	9.23	664.70	317.06	-	57.88	36212.13
IllinoisTool	229.76	4.05	248.11	173.52	1.80	30.74	70579.14
Illumina	242.75	8.18	397.44	173.45	-	54.83	38184.58
Intcntl Exch	105.20	1.10	138.46	88.60	1.10	16.68	58759.63
Intel	31.13	0.78	55.00	24.59	3.92	7.29	128452.88
Intuit	409.88	12.22	716.86	339.36	0.55	58.44	115532.83
John&John	172.14	0.23	186.69	155.72	2.14	25.09	450057.21
JohnsonCn	66.88	1.30	81.69	45.52	1.51	34.77	46067.63
JPMrgnCh	133.69	-0.22	169.44	101.28	2.50	9.91	392140.16
Kimb-Clark	128.83	1.27	144.53	108.74	3.21	27.52	43479.11
KinderM	18.67	0.14	20.20	15.01	5.23	45.92	41965.34
KLA Corp	388.49	10.58	442.44	250.20	0.88	22.76	55056.15
Kraft Heinz	36.88	0.06	44.87	32.73	3.81	51.20	45175.42
Kroger	47.08	0.52	62.78	40.18	1.47	24.47	33700.16
LasVegasSd	43.98	0.98	48.27	28.88	-	-33.16	33608.03
LibertyGbl	20.23	0.16	29.56	15.22	-	0.98	3476.72
Lilly (E)	351.10	-4.96	369.80	231.87	0.85	65.31	333609.27
Linde	335.38	3.30	346.50	262.47	1.11	52.16	165805.01
Lockheed	465.35	3.31	494.66	328.20	2.10	22.75	121956.12
Lowes	208.52	3.86	263.31	170.12	1.28	19.53	129428.48
Lyondell	86.00	-1.15	117.22	71.46	4.53	5.84	28003.7
Marathon Ptl	119.18	-0.61	123.12	59.55	1.71	67.17	55852.65
Marsh&M	165.58	0.29	183.14	142.80	1.42	29.00	82129.25
MasterCard	346.90	7.53	399.92	276.87	0.57	45.08	330874.27
McDonald's	269.64	-2.63	281.67	217.68	1.71	30.58	197490.78
McKesson	353.34	-7.74	401.78	215.27	0.44	45.56	50101.31
Medtronic	83.54	0.64	119.94	79.20	2.62	25.95	111037.47
Merck	99.96	-0.39	103.76	71.50	2.32	23.42	253438.18
Meta	196.64	0.99	384.33	169.00	-	15.41	450997.53
Metlife	74.56	0.77	75.63	57.05	2.24	11.61	58496.32
Microsoft	245.30	3.75	349.67	213.43	0.82	29.74	1828582.26
Mnstr Bvrg	98.38	1.46	100.47	71.78	-	43.58	51329.14
MondelezInt	64.87	0.77	69.47	54.72	1.80	24.29	88587.67
Monsanto	10.00	-0.01	10.01	9.66	-	52.16	249.88
MorganStly	90.98	1.17	109.73	72.05	2.03	12.90	153766.15
Netflix	311.37	12.10	700.99	162.71	-	31.54	138566.03
NextEraE	82.94	1.28	92.91	67.22	1.72	124.04	164815.35
Nike	107.36	2.97	177.75	82.22	0.96	31.95	135667.39
NorfolkS	251.37	-0.32	296.87	203.65	1.45	23.63	58194.57
Northrop	490.83	9.09	556.27	345.90	1.10	12.83	75544.7
NXP	176.61	7.60	239.91	132.08	1.12	29.61	45765.81
Occid Pet	73.77	0.49	77.13	26.05	0.05	40.77	67050.6
Oracle	80.26	1.73	106.34	60.78	1.41	34.55	216403.75
Pepsico	177.32	0.59	183.58	153.37	2.10	36.77	244296.77
Perrigo	33.11	0.47	43.90	31.32	2.55	-38.46	4457.92
Pfizer	49.29	0.05	61.71	41.45	2.78	14.28	276680.27
Phillips66	110.17	-0.09	113.53	67.08	2.89	42.23	52069.89
PhilMorris	94.90	0.97	112.48	82.85	4.54	18.53	147114.2
PNCFin	163.49	0.20	214.50	143.52	2.58	14.66	65938.63
PPG Inds	131.00	3.04	172.78	107.06	1.59	32.73	30788.59
ProctGmbl	141.81	0.83	165.35	122.18	2.22	27.44	338287.68
Prudntl	109.27	1.04	124.22	85.46	3.70	6.38	40209.52
PublStor	289.08	-1.66	421.76	270.73	2.43	33.34	50773.72
Qualcomm	127.33	6.53	192.68	101.93	1.86	16.61	142736.93
Raytheon	94.02	1.07	106.02	79.00	1.87	41.49	138215.11
Regen Pharm	730.29	-11.72	769.63	538.01	-	11.55	78202.22
S&P Global	356.88	9.21	484.21	279.32	0.76	32.48	116269.88
Salesforce	163.88	5.22	309.90	136.04	-	124.87	163881
Schlmbrg	54.09	0.02	56.04	27.65	0.81	46.65	76699.28
Sempra Energy	154.58	-1.03	176.47	119.56	2.50	43.89	48589.65
Shrwin-Will	241.21	7.13	354.15	195.24	0.80	39.34	62506.69
SimonProp	119.70	2.17	171.12	86.02	5.25	19.92	39135.41
SouthCpr	60.39	-0.09	79.32	42.42	4.65	15.66	46687.42
Starbucks	99.48	2.06	117.34	68.39	1.62	30.61	114143.35
StateSt	81.21	2.21	103.76	58.62	2.36	12.86	29799.21
Stryker	223.39	4.40	279.28	188.84	1.02	48.81	84537.46
Sychrony Fin	36.83	-0.92	51.09	27.22	2.16	5.52	16593.89
T-MobileUS	146.81	1.35	154.38	101.51	-	69.35	182654.27
Target	178.95	6.77	268.98	137.16	1.57	14.31	82364
TE Connect	128.51	3.99	166.44	104.76	1.35	19.88	41102.51
Tesla Mtrs	198.87	7.92	400.65	177.12	-	46.21	627982.23
TexasInstr	179.86	2.42	199.90	144.46	2.06	24.79	163235.85
TheTrvelers	180.92	-1.78	187.98	145.40	1.76	12.70	42398.15
ThrmoFshr	551.32	16.55	668.94	475.77	0.17	32.25	216225.25
TJX Cos	75.97	2.91	76.94	53.69	1.21	31.73	88205.19
Truist Financial Corp	46.23	0.18	66.10	40.01	3.53	11.77	61336.41
Twitter	53.70	0.35	60.16	31.30	-	-224.30	41093.72
UnionPac	213.83	-3.12	278.94	183.70	1.90	22.50	131462.86
UPS	181.15	3.36	233.72	154.87	1.98	14.05	132207.06
USBancorp	44.10	0.25	60.98	38.39	3.51	9.84	65524.96
UtdHlthcre	507.64	-6.11	558.10	436.00	0.97	31.97	474312.96
ValeroEngy	138.77	1.97	146.81	65.13	2.48	69.60	53499.07
Verizon	38.30	-0.02	55.51	34.55	5.81	8.20	160832.01
VertexPharm	305.83	-0.20	318.38	179.96	-	38.64	78503.95
VF Cp	33.74	0.63	78.91	26.46	5.13	12.59	13110.22
Visa Inc	212.58	5.72	235.85	174.60	0.55	40.07	347563.24
Walgreen	41.36	0.82	53.46	30.39	4.07	6.82	35764.35
WalMartSto	148.48	10.09	160.77	117.27	1.31	34.38	403010.05
Walt Disney	95.77	1.49	160.72	86.28	-	63.39	174594.24
Waste Manage.	156.09	-1.50	175.98	138.58	1.29	41.42	64071.37
WellsFargo	47.00	0.13	60.30	36.54	1.44	10.81	179093.07
Williams Cos	33.88	0.11	37.97	24.86	4.25	31.10	41271.26
Workday	161.21	7.83	307.81	128.72	-	1515.04	32403.21
Yum!Brnds	123.93	1.33	139.85	103.97	1.42	27.08	34909.58
Zoetis	150.49	4.04	249.27	124.15	0.58	40.12	70139.17
Zoom	88.08	3.73	268.88	70.44	-	22.07	22104.64
Venezuela (VEF)							
Bco de Vnzla	1.20	0.05	2.14	0.32	148.69	-	470.52
Bco Provncl	3.17	0.02	3.30	1.70	-	0.00	127.80

Closing prices and highs & lows are in traded currency (with variations for that country indicated by stock), market capitalisation is in USD. Highs & lows are based on intraday trading over a rolling 52 week period.
♦ ex-dividend
■ ex-capital redistribution
price at time of suspension

FT 500: TOP 20

	Close price	Prev price	Day change	Day change %	Week change	Week change %	Month change %
China Vanke	14.18	13.84	0.34	2.46	3.12	28.2	2.03
SHOP	54.53	51.12	3.41	6.67	11.02	25.3	50.91
Carnival	11.31	10.60	0.71	6.70	2.21	24.3	58.76
Ch OSLnd&Inv	20.30	20.05	0.25	1.25	3.82	23.2	-0.74
TaiwanSem	480.00	445.00	35.00	7.87	90.00	23.1	16.50
ChinaMBank	36.90	35.95	0.95	2.64	6.60	21.8	19.90
Advanced Micro	77.40	73.53	3.87	5.26	13.55	21.2	38.28
PingAnIns	44.15	41.90	2.25	5.37	7.35	20.0	15.47
HK Exc&Clr	309.20	291.80	17.40	5.96	49.60	19.1	25.22
Netflix	311.37	299.27	12.10	4.04	47.91	18.2	35.27
VF Cp	33.74	33.11	0.63	1.90	5.19	18.2	16.44
Tencent	288.00	260.60	27.40	10.51	42.60	17.4	15.33
SandsCh	19.88	18.74	1.14	6.08	2.84	16.7	22.41
MediaTek	722.00	697.00	25.00	3.59	102.00	16.5	23.42
Autodesk	231.02	223.31	7.71	3.45	32.01	16.1	21.69
Franklin	27.27	26.46	0.81	3.06	3.75	15.9	25.56
Vale	83.31	82.30	1.01	1.23	11.44	15.9	19.30
Adobe	348.68	340.37	8.31	2.44	46.51	15.4	20.90
Workday	161.21	153.38	7.83	5.10	21.03	15.0	15.45
ASML Hld	576.20	565.30	10.90	1.93	74.60	14.9	45.13

Based on the FT Global 500 companies in local currency

FT 500: BOTTOM 20

	Close price	Prev price	Day change	Day change %	Week change	Week change %	Month change %
Bradesco	13.10	13.00	0.10	0.77	-2.79	-17.6	-19.68
Vodafone	95.89	104.16	-8.27	-7.94	-10.35	-9.7	-3.47
McKesson	353.34	361.08	-7.74	-2.14	-37.43	-9.6	0.10
Northrop	490.83	481.74	9.09	1.89	-50.10	-9.3	5.69
ItauHldFin	22.90	22.90	0.00	0.00	-2.05	-8.2	-4.62
UtdHlthcre	507.64	513.75	-6.11	-1.19	-45.41	-8.2	-1.03
Cielo	5.11	5.11	0.00	0.00	-0.45	-8.1	-11.13
Fuji Hvy Ind	2316.00	2301.50	14.50	0.63	-194.00	-7.7	1.22
HumanaInc	519.16	530.00	-10.84	-2.05	-38.58	-6.9	3.84
Softbank	6147.00	6068.00	79.00	1.30	-454.00	-6.9	8.73
CardinalHlth	74.80	75.21	-0.41	-0.55	-5.31	-6.6	9.86
DominRes	58.62	57.96	0.66	1.14	-4.00	-6.4	-8.82
PTT Explor	33.50	34.00	-0.50	-1.47	-2.25	-6.3	-2.90
Nippon T&T	3758.00	3780.00	-22.00	-0.58	-246.00	-6.1	-5.06
NipponTT	3758.00	3780.00	-22.00	-0.58	-246.00	-6.1	-5.06
Equinor	356.65	354.00	2.65	0.75	-23.10	-6.1	-2.06
Cigna	308.01	306.85	1.16	0.38	-19.73	-6.0	4.23
Lockheed	465.35	462.04	3.31	0.72	-28.77	-5.8	19.50
Bristol-Myers	75.89	76.39	-0.51	-0.66	-4.10	-5.1	7.45
Imperial Brands	2027.00	2038.00	-11.00	-0.54	-108.00	-5.1	0.55

Based on the FT Global 500 companies in local currency

BONDS: HIGH YIELD & EMERGING MARKET

Nov 15	Red date	Coupon	Ratings S*	Ratings M*	Ratings F*	Bid price	Bid yield	Day's chge yield	Mth's chge yield	Spread vs US
High Yield US$										
HCA Inc.	04/24	8.36	BB-	Ba2	BB	113.75	4.24	0.00	0.12	-
High Yield Euro										
Aldesa Financial Services S.A.	04/21	7.25	-	-	B	71.10	28.23	0.00	0.64	25.98
Emerging US$										
Peru	03/19	7.13	BBB+	A3	BBB+	104.40	2.60	-	-	0.34
Colombia	01/26	4.50	-	Baa2	BBB-	109.50	2.33	0.16	0.52	1.28
Brazil	04/26	6.00	-	Ba2	BB-	115.15	2.78	-0.01	0.65	1.73
Poland	04/26	3.25	-	A2	A-	111.22	0.98	0.03	0.16	-0.07
Mexico	05/26	11.50	-	Baa1	BBB-	149.00	1.61	0.00	-0.12	0.56
Turkey	03/27	6.00	-	Ba2	BB+	101.26	5.82	0.00	0.17	3.07
Turkey	03/27	6.00	-	B2	BB-	102.88	5.43	0.14	0.83	4.38
Peru	08/27	4.13	BBB+	A3	BBB+	103.50	3.66	0.01	-0.02	0.80
Russia	06/28	12.75	-	Baa3	BBB	168.12	2.48	0.07	0.05	-
Brazil	02/47	5.63	-	Ba2	BB-	101.48	5.52	0.08	0.80	-
Emerging Euro										
Brazil	04/21	2.88	BB-	Ba2	BB-	103.09	0.05	0.01	-0.09	-1.19
Mexico	04/23	2.75	BBB+	A3	BBB+	107.76	0.76	0.00	-0.07	-1.56
Mexico	04/23	2.75	-	Baa1	BBB-	106.48	-0.26	-	-	-0.36
Bulgaria	03/28	3.00	BBB-	Baa2	BBB	117.04	1.00	0.02	-0.15	-1.42

Interactive Data Pricing and Reference Data LLC, an ICE Data Services company. US $ denominated bonds NY close; all other London close. *S - Standard & Poor's, M - Moody's, F - Fitch.

BONDS: GLOBAL INVESTMENT GRADE

Nov 15	Red date	Coupon	Ratings S*	Ratings M*	Ratings F*	Bid price	Bid yield	Day's chge yield	Mth's chge yield	Spread vs US
US$										
FleetBoston Financial Corp.	01/28	6.88	BBB+	Baa1	A-	129.00	2.54	-0.01	-0.05	-
The Goldman Sachs Group, Inc.	02/28	5.00	BBB+	A3	A	117.21	2.47	0.00	0.32	-
NationsBank Corp.	03/28	6.80	BBB+	Baa1	A-	127.69	2.72	-0.01	0.06	-
GTE LLC	04/28	6.94	BBB+	Baa2	A-	128.27	2.80	0.00	-0.11	-
United Utilities PLC	08/28	6.88	BBB	Baa1	A-	130.43	2.62	-0.07	-0.22	-
Barclays Bank plc	01/29	4.50	A	A1	A+	96.46	5.02	0.00	0.02	-
Euro										
Electricite de France (EDF)	04/30	4.63	A-	A3	A-	137.45	0.82	-0.01	0.10	-
The Goldman Sachs Group, Inc.	02/31	3.00	BBB+	A3	A	124.42	0.68	0.00	-0.11	-
The Goldman Sachs Group, Inc.	02/31	3.00	BBB+	A3	A	121.70	0.93	0.00	0.02	-
Finland	04/31	0.75	AA+	Aa1	AA+	111.08	-0.27	0.00	-0.05	-0.87
Yen										
Mexico	06/26	1.09	-	Baa1	BBB-	98.73	1.34	-0.02	-0.14	0.27
£ Sterling										
innogy Fin B.V.	06/30	6.25	BBB	Baa2	A-	137.45	2.19	-0.03	0.02	-
innogy Fin B.V.	06/30	6.25	BBB	Baa2	A-	128.68	3.20	0.00	-0.01	0.40

Interactive Data Pricing and Reference Data LLC, an ICE Data Services company. US $ denominated bonds NY close; all other London close. *S - Standard & Poor's, M - Moody's, F - Fitch.

INTEREST RATES: OFFICIAL

Nov 15	Rate	Current	Since	Last
US	Fed Funds	3.00-3.25	21-09-2022	2.25-2.5
US	Prime	6.25	22-09-2022	5.50
US	Discount	3.25	22-09-2022	2.50
Euro	Repo	0.53	01-11-2022	0.374
UK	Repo	3.00	02-11-2022	2.25
Japan	O'night Call	0.00-0.10	01-02-2016	0.00
Switzerland	Libor Target	-1.25-0.25	15-01-2015	-0.75--0.25

INTEREST RATES: MARKET

Nov 15 (Libor: Nov 14)	Over night	Change Day	Change Week	Change Month	One month	Three month	Six month	One year
US$ Libor	3.81857	0.004	0.002	0.011	3.88657	4.64386	5.10386	5.48357
Euro Libor	-0.64957	-0.064	0.000	0.001	-0.61943	-0.58057	-0.55600	-0.48571
£ Libor	0.18063	-0.005	0.000	0.004	2.96210	3.51000	4.08780	0.81363
Swiss Fr Libor				-0.002	-0.77540	-0.75300	-0.70280	-0.55320
Yen Libor				0.000	-0.06005	-0.04097	0.03035	0.04867
Euro Euribor				0.043	1.40500	1.79100	2.33700	2.86700
Sterling CDs				0.000	0.50000	0.63000	0.78500	
US$ CDs				0.020	3.86000	4.51000	4.94000	
Euro CDs				0.010	1.40000	1.72000	2.17000	

Nov 15	Short term		7 Days notice		One month		Three month		Six month		One year	
Euro	1.16	1.46	1.17	1.47	1.25	1.55	1.57	1.87	2.02	2.32	2.42	2.72
Sterling					0.45	0.55	0.58	0.68	0.71	0.86	0.90	1.05
US Dollar	3.62	3.82	3.64	3.84	3.76	3.96	4.41	4.61	4.84	5.04	5.11	5.31
Japanese Yen	-0.15	0.05	-0.20	0.00	-0.20	0.00	-0.15	0.05	-0.10	0.20	-0.05	0.25

Libor rates come from ICE (see www.theice.com) and are fixed at 11am UK time. Other data sources: US $, Euro & CDs: Tullett Prebon; SDR, US Discount: IMF; EONIA: ECB; Swiss Libor: SNB; EURONIA, RONIA & SONIA: WMBA.

BOND INDICES

	Index	Day's change	Month's change	Year change	Return 1 month	Return 1 year
Markit IBoxx						
ABF Pan-Asia unhedged	194.49	0.11	3.90	-11.51	3.70	-11.18
Corporates(£)	323.38	0.15	2.52	-18.30	9.72	-18.95
Corporates(€)	207.69	0.12	1.23	-14.01	2.29	-14.62
Eurozone Sov(€)	212.80	0.01	0.20	-16.36	1.92	-17.31
Gilts(£)	279.34	0.02	2.00	-22.29	12.39	-22.77
Overall(£)	286.09	0.05	2.02	-20.97	11.22	-21.48
Overall(€)	207.98	0.06	0.52	-15.69	2.01	-16.52
FTSE						
Sterling Corporate (£)	-	-	-	-	-	-
Euro Corporate (€)	104.47	-0.05	-	-	0.54	-1.73
Euro Emerging Mkts (€)	620.15	-9.85	-	-	12.82	-22.93
Eurozone Govt Bond	110.04	-0.19	-	-	-0.34	-0.64

CREDIT INDICES	Index	Day's change	Week's change	Month's change	Series high	Series low
Markit iTraxx						
Crossover 5Y	465.04	-10.35	-50.16	-162.01	688.92	465.00
Europe 5Y	93.05	-2.88	-11.99	-38.24	142.08	93.05
Japan 5Y	83.10	-1.65	-10.85	-21.97	119.29	82.94
Senior Financials 5Y	102.82	-2.84	-11.40	-42.12	155.06	102.82
Markit CDX						
Emerging Markets 5Y	242.78	-4.09	-29.04	-84.24	335.29	242.78
Nth Amer High Yld 5Y	491.75	5.69	-22.53	-71.25	625.47	486.06
Nth Amer Inv Grade 5Y	83.41	0.36	-5.05	-15.15	110.98	83.05

Websites: markit.com, ftse.com. All indices shown are unhedged. Currencies are shown in brackets after the index names.

VOLATILITY INDICES

	Nov 15	Day Chng	Prev	52 wk high	52 wk low
VIX	23.51	-0.22	23.73	38.93	16.03
VXD	21.28	-0.59	21.87	45.37	3.27
VXN	29.43	-0.59	30.02	44.05	9.94
VDAX	21.93	0.26	21.67	93.30	-

† CBOE. VIX: S&P 500 index Options Volatility, VXD: DJIA Index Options Volatility, VXN: NASDAQ Index Options Volatility. ‡ Deutsche Borse. VDAX: DAX Index Options Volatility.

BONDS: BENCHMARK GOVERNMENT

	Red Date	Coupon	Bid Price	Bid Yield	Day chg yield	Wk chg yield	Month chg yld	Year chg yld
Australia	11/22	2.25	99.99	2.91	-0.02	0.01	0.20	2.68
	05/32	1.25	80.10	3.76	0.11	-0.14	-0.25	-
	02/50	1.00	93.79	1.72	0.07	-0.16	-0.36	1.52
Austria	02/29	0.50	88.10	2.58	-0.03	-0.19	-0.16	2.79
	02/47	1.50	75.83	2.90	0.01	-0.13	-0.34	2.49
Belgium	06/27	0.80	93.40	2.33	0.00	-0.12	-0.12	2.72
	06/47	1.60	74.33	3.11	0.00	-0.09	-0.32	2.41
Canada	03/25	1.25	94.41	3.82	0.04	-0.30	-0.26	2.58
	06/30	1.25	87.32	3.15	0.01	-0.44	-0.36	1.56
	12/48	2.75	90.34	3.31	0.00	-0.33	-0.15	1.29
Denmark	11/29	0.50	88.00	2.38	0.00	-0.22	-0.22	2.53
	11/52	0.25	56.06	2.29	-0.01	-0.21	-0.45	2.02
Finland	09/24	0.00	96.12	2.18	-0.01	-0.03	0.07	2.86
	09/29	0.50	86.58	2.68	-0.01	-0.15	-0.13	2.87
France	05/28	0.75	91.57	2.40	-0.01	-0.12	-0.13	2.66
	05/48	2.00	81.98	3.02	0.01	-0.12	-0.30	2.37
Germany	08/29	0.00	87.04	2.08	-0.01	-0.12	-0.10	2.49
	08/50	0.00	55.86	2.12	0.01	-0.13	-0.29	2.08
Greece	01/23	3.50	100.42	1.42	0.01	0.22	0.11	1.64
	01/28	3.75	99.75	3.80	-0.11	-0.35	-0.54	3.14
Ireland	-	-	-	-	-	-	-	-
	05/26	1.00	95.75	2.28	0.01	-0.04	0.05	2.70
	02/45	2.00	83.65	3.02	0.02	-0.10	-0.31	2.41
Italy	02/25	0.35	94.70	2.84	-0.04	-0.21	-0.33	2.95
	05/30	0.40	91.46	1.61	0.01	-0.17	-0.70	2.53
	03/48	3.45	87.15	4.29	-0.01	-0.19	-0.45	2.58
Japan	04/25	0.05	100.03	0.04	0.01	-0.01	-0.02	-0.04
	12/29	0.10	99.55	0.16	0.02	-0.06	-0.06	0.18
	12/49	0.40	77.66	1.39	0.03	-0.07	0.03	0.72
Netherlands	07/27	0.75	93.58	2.21	0.00	-0.12	-0.09	2.68
	01/47	2.75	105.66	2.44	0.00	-0.16	-0.35	2.35
New Zealand	05/31	1.50	80.62	4.24	0.05	-0.30	-0.23	1.62
	09/40	2.50	119.87	2.32	0.05	-0.15	-0.37	1.31
Norway	08/30	1.38	87.07	3.29	-0.07	-0.22	-0.33	1.66
Poland	01/23	2.50	99.18	6.89	-0.12	-0.44	-0.68	4.11
	07/27	2.50	80.95	7.46	0.08	-0.74	-0.51	4.47
	04/47	4.00	61.41	7.48	0.00	-0.95	0.38	3.96
Portugal	04/27	4.13	106.67	2.51	0.01	-0.09	-0.06	2.71
Spain	-	-	-	-	-	-	-	-
	10/29	0.60	86.05	2.84	-0.01	-0.15	-0.28	2.64
	10/46	2.90	90.28	3.51	0.00	-0.14	-0.37	2.40
Sweden	06/30	0.13	115.57	-0.16	-0.01	-0.08	0.08	1.64
	03/39	3.50	121.31	1.96	0.00	-0.16	-0.11	1.43
Switzerland	04/28	4.00	116.09	0.93	0.03	-0.02	-0.19	1.24
	06/29	0.00	93.99	0.94	0.00	-0.09	-0.24	1.19
United Kingdom	07/23	0.75	98.45	3.05	0.02	-0.01	-0.46	2.60
	07/27	1.25	90.97	3.35	-0.01	-0.18	-0.94	2.70
	07/47	1.50	65.93	3.59	0.02	-0.34	-1.27	2.48
United States	-	-	-	-	-	-	-	-
	03/25	0.50	91.52	4.29	0.04	-0.36	-0.21	3.34
	02/30	1.50	85.08	3.88	0.02	-0.37	-0.23	2.40
	02/50	0.25	67.04	1.78	0.06	-0.12	-0.04	-

Interactive Data Pricing and Reference Data LLC, an ICE Data Services company.

GILTS: UK CASH MARKET

Nov 15	Price £	Red Yield	Change in Yield Day	Week	Month	Year	52 Week High	52 Week Low	Amnt £m
	-	-	-	-	-	-	-	-	-
Tr 0.75pc '23	98.50	2.99	-0.33	-2.61	-12.83	550.00	100.82	97.34	34.36
Tr 0.125pc '24	96.45	3.15	-0.94	-3.67	-16.67	483.33	99.44	94.34	35.55
Tr 2pc '25	97.14	3.07	-0.97	-4.95	-22.28	448.21	105.86	93.15	39.93
Tr 0.125pc '26	90.90	3.13	-0.95	-4.57	-24.21	421.67	98.77	86.33	35.32
Tr 1.25pc '27	91.18	3.30	-0.90	-5.17	-22.54	392.54	104.30	85.65	40.99
Tr 0.875pc '29	85.21	3.28	-1.20	-6.02	-22.27	304.94	102.36	78.21	43.62
Tr 4.25pc '32	107.77	3.29	-1.79	-7.32	-22.22	239.18	135.62	98.13	40.33
Tr 4.25pc '36	107.18	3.57	-0.83	-6.54	-20.84	230.56	145.94	94.91	31.68
Tr 4.5pc '42	111.90	3.66	-0.27	-6.39	-22.29	221.05	169.96	93.79	28.35
Tr 3.75pc '52	105.05	3.48	-0.29	-7.20	-24.35	219.27	180.27	82.51	25.11
Tr 4pc '60	116.45	3.24	-0.92	-8.22	-27.19	217.65	213.01	87.32	25.13

Gilts benchmarks & non-rump undated stocks. Closing mid-price in pounds per £100 nominal of stock.

GILTS: UK FTSE ACTUARIES INDICES

Price Indices Fixed Coupon	Nov 15	Day's chg %	Total Return	Return 1 month	Return 1 year	Yield
1 Up to 5 Years	81.80	0.07	2352.30	1.52	-4.28	3.19
2 5 - 10 Years	150.44	0.31	3173.42	4.78	-13.69	3.31
3 10 - 15 Years	161.42	0.49	3708.90	8.02	-20.49	3.53
4 5 - 15 Years	152.17	0.36	3302.67	5.66	-15.81	3.40
5 Over 15 Years	233.13	0.44	3989.99	17.64	-35.35	3.43
7 All stocks	140.54	0.29	3125.55	8.17	-21.26	3.41

Index Linked	Nov 15	Day's chg %	Month chg %	Year's chg %	Total Return	Return 1 month	Return 1 year
1 Up to 5 Years	326.21	0.04	1.84	3.87	2758.37	2.11	5.07
2 Over 5 years	585.88	-0.49	20.45	-35.61	4465.73	20.60	-35.32
3 5-15 years	465.33	0.48	11.14	-13.75	3763.51	11.32	-13.10
4 Over 15 years	681.71	-1.06	26.75	-44.00	5044.61	26.90	-43.83
5 All stocks	548.90	-0.41	17.24	-31.66	4268.18	17.41	-31.29

Yield Indices	Nov 15	Nov 14	Yr ago		Nov 15	Nov 14	Yr ago
5 Yrs	3.17	3.22	0.64	20 Yrs	3.64	3.66	1.17
10 Yrs	3.44	3.49	0.95	45 Yrs	3.10	3.14	0.93
15 Yrs	3.63	3.65	1.12				

Real yield	inflation 0% Nov 15	Dur yrs	Previous	Yr ago	inflation 5% Nov 15	Dur yrs	Previous	Yr ago
Up to 5 yrs	-1.64	1.46	-1.61	-3.73	-2.17	1.46	-2.15	-4.06
Over 5 yrs	-0.09	19.71	-0.11	-2.54	-0.11	19.75	-0.13	-2.56
5-15 yrs	-0.44	8.57	-0.38	-3.08	-0.52	8.58	-0.46	-3.16
Over 15 yrs	-0.02	25.95	-0.06	-2.49	-0.03	25.96	-0.07	-2.49
All stocks	-0.11	17.06	-0.13	-2.56	-0.13	17.12	-0.16	-2.57

See FTSE website for more details www.ftse.com/products/indices/gilts
©2018 Tradeweb Markets LLC. All rights reserved. The Tradeweb FTSE Gilt Closing Prices information contained herein is proprietary to Tradeweb; may not be copied or re-distributed; is not warranted to be accurate, complete or timely; and does not constitute investment advice. Tradeweb is not responsible for any loss or damage that might result from the use of this information.

COMMODITIES

www.ft.com/commodities

Energy		Price*	Change	Agricultural & Cattle Futures		Price*	Change
Crude Oil†	Dec	84.84	-1.03	Corn♦	Dec	654.25	-3.00
Brent Crude Oil‡		93.27	0.13	Wheat♦	Dec	809.00	-9.50
RBOB Gasoline†	Dec	2.51	-0.02	Soybeans♦	Jan	1436.50	-4.00
Natural Gas†	Dec	5.97	0.04	Soybeans Meal♦	Dec	405.40	-0.60
Base Metals (♠ LME 3 Months)				Cocoa (ICE Liffe)✠	Dec	1997.00	-6.00
Aluminium		2445.50	6.00	Cocoa (ICE US)♥	Dec	2546.00	49.00
Aluminium Alloy		1675.00	-905.00	Coffee(Robusta)✠	Nov	1831.00	-9.00
Copper		8372.00	-43.00	Coffee (Arabica)♥	Dec	158.70	-7.50
Lead		2195.00	9.00	White Sugar✠		550.80	12.30
Nickel		29325.00	370.00	Sugar 11♥		19.83	0.00
Tin		23165.00	1565.00	Cotton♥	Dec	86.61	1.33
Zinc		3129.50	9.50	Orange Juice♥	Jan	198.35	3.40
Precious Metals (PM London Fix)				Live Cattle♣	Dec	151.60	0.08
Gold		1768.90	9.55	Feeder Cattle♣	May	134.88	-
Silver (US cents)		2147.00	-1.00	Lean Hogs♣	Dec	84.90	0.55
Platinum		1013.00	-27.00				
Palladium		2004.00	-28.00		Nov 14	% Chg Month	% Chg Year
Bulk Commodities							
Iron Ore		92.09	1.30	S&P GSCI Spt	639.73	1.25	10.31
Baltic Dry Index		1300.00	-25.00	DJ UBS Spot	117.00	2.93	13.42
Richards Bay ICE Futures		187.65	3.30	TR/CC CRB TR	304.45	2.32	20.81
				LEBA EUA Carbon	58.91	-1.98	129.94
				LEBA UK Power	1048.00	-37.43	-39.60

Sources: † NYMEX, ‡ ECX/ICE, ♦ CBOT, ✠ ICE Liffe, ♥ ICE Futures, ♣ CME, ♠ LME/London Metal Exchange.* Latest prices, $ unless otherwise stated.

BONDS: INDEX-LINKED

	Price Nov 14	Yield Nov 14	Yield Prev	Month return	Value stock	Market	No of stocks
Can 4.25%' 26	111.49	1.318	1.289	0.40	5.25	72753.14	8
Fr 0.25%' 24	103.33	-1.673	-1.675	0.58	17.92	250269.30	17
Swe 1.00%' 25	125.35	-0.387	-0.441	0.70	35.38	218229.47	6
UK 0.125%' 24	104.75	-3.286	-3.307	0.52	15.24	604670.52	31
UK 2.50%' 24	379.50	-2.297	-2.296	0.70	6.82	604670.52	31
UK 2.00%' 35	253.00	-0.282	-0.233	5.37	9.08	604670.52	31
US 0.625%' 24	98.13	2.260	2.142	-0.11	40.98	1590849.64	47
US 3.625%' 28	109.58	1.762	1.657	0.28	16.78	1590849.64	47

Representative stocks from each major market Source: Merill Lynch Global Bond Indices † Local currencies. ‡ Total market value. In line with market convention, for UK Gilts inflation factor is applied to price, for other markets it is applied to par amount.

BONDS: TEN YEAR GOVT SPREADS

	Bid Yield	Spread vs Bund	Spread vs T-Bonds		Bid Yield	Spread vs Bund	Spread vs T-Bonds
Australia	3.76	1.68	-0.12	Netherlands	2.21	0.14	-1.67
Austria	2.58	0.50	-1.30	New Zealand	4.24	2.16	0.36
Canada	3.15	1.07	-0.73	Norway	3.29	1.21	-0.59
Denmark	2.38	0.30	-1.50	Portugal	2.51	0.43	-1.37
Finland	2.68	0.60	-1.20	Spain	2.84	0.76	-1.04
Germany	2.08	0.00	-1.80	Sweden	-0.16	-2.24	-4.04
Italy	1.61	-0.47	-2.27	Switzerland	0.94	-1.14	-2.94
Japan	0.16	-1.92	-3.72	United States	3.88	1.80	0.00

Interactive Data Pricing and Reference Data LLC, an ICE Data Services company.

All data provided by Morningstar unless otherwise noted. All elements listed are indicative and believed accurate at the time of publication. No offer is made by Morningstar, its suppliers, or the FT. Neither the FT, nor Morningstar's suppliers, warrant or guarantee that the information is reliable or complete. Neither the FT nor Morningstar's suppliers accept responsibility and will not be liable for any loss arising from the reliance on the use of the listed information. For all queries e-mail ft.reader.enquiries@morningstar.com

Data provided by Morningstar | www.morningstar.co.uk

POWERED BY MORNINGSTAR

Equity Research from Morningstar

Make confident investment decisions powered by our independent global insights and a consistent methodology across our qualitative and quantitative universes.

Get your next investing idea from one of the world's largest independent analyst teams at morningstar.com/products/research/institutional

MORNINGSTAR®

MANAGED FUNDS SERVICE

abrdn Capital (CI) Limited (JER)
PO Box 189, St Helier, Jersey, JE4 9RU 01534 709130
FCA Recognised
abrdn Capital Offshore Strategy Fund Limited

Fund	Bid	Offer	D+/-	Yield
Bridge Fund	£ 2.1901	-	-0.0091	1.90
Global Equity Fund	£ 3.2700	-	-0.0250	1.20
Global Fixed Interest Fund	£ 0.7303	-	0.0033	6.18
Income Fund	£ 0.6327	-	-0.0009	3.31
Sterling Fixed Interest Fund	£ 0.6769	-	0.0000	3.68
UK Equity Fund	£ 1.9602	-	0.0109	3.84

Algebris Investments (IRL)
Regulated

Fund	Bid	Offer	D+/-	Yield
Algebris Financial Credit I EUR	€ 168.59	-	0.56	-
Algebris Financial Credit R EUR	€ 145.10	-	0.47	-
Algebris Financial Credit Rd EUR	€ 88.78	-	0.29	-
Algebris Financial Income I EUR	€ 174.39	-	0.04	0.00
Algebris Financial Income R EUR	€ 158.77	-	0.02	0.00
Algebris Financial Income Rd EUR	€ 97.31	-	0.01	4.41
Algebris Financial Equity B EUR	€ 158.03	-	-0.52	0.00
Algebris Financial Equity R EUR	€ 132.98	-	-0.45	0.00
Algebris IG Financial Credit I EUR	€ 93.00	-	0.20	-
Algebris IG Financial Credit R EUR	€ 91.59	-	0.18	-
Algebris Global Credit Opportunities I EUR	€ 122.10	-	0.15	-
Algebris Global Credit Opportunities R EUR	€ 119.23	-	0.15	-
Algebris Global Credit Opportunities Rd EUR	€ 104.81	-	0.13	-
Algebris Core Italy I EUR	€ 141.72	-	0.03	0.00
Algebris Core Italy R EUR	€ 134.58	-	0.01	0.00

The Antares European Fund Limited
Other International

Fund	Bid	Offer	D+/-	Yield
AEF Ltd Usd	$ 570.82	-	-8.81	0.00
AEF Ltd Eur	€ 526.30	-	-8.16	0.00

Artemis Fund Managers Ltd (1200)F (UK)
57 St. James's Street, London SW1A 1LD 0800 092 2051
Authorised Inv Funds

Fund	Bid	Offer	D+/-	Yield
Artemis Corporate Bond I Acc	97.10	-	0.76	3.02
Artemis Positive Future Fund	69.78	-	0.20	0.00
Artemis Target Return Bond I Acc	103.74	-	0.18	2.84

Ashmore Group
61 Aldwych, London WC2B 4AE. Dealing team: +352 27 62 22 233
Authorised Inv Funds

Fund	Bid	Offer	D+/-	Yield
Emerging Markets Equity Fund	$ 112.12	-	0.27	0.00
Emerging Markets Equity ESG Fund	$ 126.55	-	0.42	0.00
Emerging Markets Frontier Equity Fund	$ 175.69	-	-1.58	0.40
Emerging Markets Blended Debt Fund	$ 50.30	-	0.24	6.88
Emerging Markets Blended Debt ESG Fund	$ 80.37	-	0.23	0.00
Emerging Markets Active Equity Fund	$ 114.08	-	4.10	0.00
Emerging Markets Corporate Debt Fund	$ 57.76	-	1.52	9.89
Emerging Markets Debt Fund	$ 54.58	-	0.33	8.44
Emerging Markets Local Currency Bond Fund	$ 58.87	-	0.13	4.44

Atlantas Sicav (LUX)
Regulated

Fund	Bid	Offer	D+/-	Yield
American Dynamic	$ 6442.86	-	348.92	0.00
American One	$ 6623.94	-	353.97	0.00
Bond Global	€ 1581.48	1581.48	10.04	0.00
Eurocroissance	€ 1326.30	-	76.31	0.00
Far East	$ 977.41	-	91.79	-

Blue Whale Investment Funds ICAV (IRE)
www.bluewhale.co.uk, info@bluewhale.co.uk
FCA Recognised - Ireland UCITS

Fund	Bid	Offer	D+/-	Yield
Blue Whale Growth USD T	$ 8.86	-	-0.05	0.00

Brooks Macdonald International Fund Managers Limited (JER)
5 Anley Street, St Helier, Jersey, JE2 3QE
+44 (0) 1534 700 104 (Int.) +44 (0) 800 735 8000 (UK)
Brooks Macdonald International Investment Funds Limited

Fund	Bid	Offer	D+/-	Yield
Euro High Income	€ 1.2158	-	0.0020	2.50
High Income	£ 0.6512	-	0.0007	3.77
Sterling Bond	£ 1.2391	-	0.0016	2.06

Brooks Macdonald International Multi Strategy Fund Limited

Fund	Bid	Offer	D+/-	Yield
Balanced Strategy A	£ 0.9149	-	0.0031	0.60
Balanced Strategy	£ 0.9143	-	0.0031	0.09
Cautious Balanced Strategy A	£ 0.8866	-	0.0028	1.16
Growth Strategy A	£ 0.9220	-	0.0020	0.52
High Growth Strategy A	£ 0.9191	-	0.0007	0.13
Cautious Balanced Strategy	£ 1.2402	-	0.0039	0.00
Growth Strategy	£ 1.9299	-	0.0042	0.00
High Growth Strategy	£ 2.6961	-	0.0019	0.00
US$ Growth Strategy	$ 1.6236	-	-0.0026	0.00

Dealing Daily. Initial Charge Nil for A classes and up to 2% for other classes

CG Asset Management Limited (IRL)
25 Moorgate, London, EC2R 6AY
Dealing: Tel. +353 1434 5098 Fax. +353 1542 2859
FCA Recognised
CG Portfolio Fund Plc

Fund	Bid	Offer	D+/-	Yield
Absolute Return Cls M Inc	£ 136.75	136.75	-0.12	1.36
Capital Gearing Portfolio GBP P	£ 37698.44	37698.44	-33.02	1.05
Capital Gearing Portfolio GBP V	£ 183.35	183.35	-0.16	1.05
Dollar Fund Cls D Inc	£ 168.32	168.32	-2.05	1.42
Dollar Hedged GBP Inc	£ 91.72	91.72	-0.70	1.71
Real Return Cls A Inc	£ 202.74	202.74	-1.57	1.46

Chartered Asset Management Pte Ltd
Other International Funds

Fund	Bid	Offer	D+/-	Yield
CAM-GTF VCC	$ 276934.95	276934.95	-141.90	-
CAM GTi VCC	$ 780.49	-	-32.39	-
RAIC VCC	$ 1.64	1.64	0.03	2.06

Dodge & Cox Worldwide Funds (IRL)
48-49 Pall Mall, London SW1Y 5JG.
www.dodgeandcox.worldwide.com 020 3713 7664
FCA Recognised
Dodge & Cox Worldwide Funds plc - Global Bond Fund

Fund	Bid	Offer	D+/-	Yield
EUR Accumulating Class	€ 15.71	-	0.08	0.00
EUR Accumulating Class (H)	€ 10.12	-	0.03	-
EUR Distributing Class	€ 11.52	-	0.06	0.96
EUR Distributing Class (H)	€ 7.36	-	0.02	-
GBP Distributing Class	£ 12.40	-	0.12	0.87
GBP Distributing Class (H)	£ 7.87	-	0.03	1.16
USD Accumulating Class	$ 11.71	-	0.03	0.00

Dodge & Cox Worldwide Funds plc-Global Stock Fund

Fund	Bid	Offer	D+/-	Yield
USD Accumulating Share Class	$ 27.89	-	-0.22	-
GBP Accumulating Share Class	£ 39.02	-	-0.03	0.00
GBP Distributing Share class	£ 26.33	-	-0.02	-
EUR Accumulating Share Class	€ 40.54	-	-0.22	-
GBP Distributing Class (H)	£ 12.97	-	-0.10	0.57

Dodge & Cox Worldwide Funds plc-U.S. Stock Fund

Fund	Bid	Offer	D+/-	Yield
USD Accumulating Share Class	$ 38.03	-	-0.37	0.00
GBP Accumulating Share Class	£ 50.31	-	-0.13	-
GBP Distributing Share Class	£ 30.20	-	-0.08	0.16
EUR Accumulating Share Class	€ 47.73	-	-0.35	0.00
GBP Distributing Class (H)	£ 15.12	-	-0.15	0.20

Dragon Capital
www.dragoncapital.com
Fund information:info@dragoncapital.com
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Vietnam Equity (UCITS) Fund A USD	$ 21.38	-	-0.66	0.00

EdenTree Investment Management Ltd (UK)
PO Box 3733, Swindon, SN4 4BG, 0800 358 3010
Authorised Inv Funds

Fund	Bid	Offer	D+/-	Yield
EdenTree Short Dated Bond Cls B	92.93	-	-0.01	-

Euronova Asset Management UK LLP (CYM)
Regulated

Fund	Bid	Offer	D+/-	Yield
Smaller Cos Cls One Shares	€ 50.93	-	-0.11	0.00
Smaller Cos Cls Two Shares	€ 32.52	-	-0.08	0.00
Smaller Cos Cls Three Shares	€ 16.23	-	-0.04	0.00
Smaller Cos Cls Four Shares	€ 21.39	-	-0.05	0.00

Fidelity Investments International
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Emerging Mkts NAV	£ 7.21	-	-0.16	2.07

FIL Investment Services (UK) Limited (1200)F (UK)
Beech Gate, Millfield Lane, Lower Kingswood, Tadworth, KT20 6RP
Callfree: Private Clients 0800 414161
Broker Dealings: 0800 414 181
OEIC Funds

Fund	Bid	Offer	D+/-	Yield
Index Sterling Corporate Bond Fund P-ACC-GBP	£ 0.82	-	0.00	2.03
Sustainable Multi Asset Balanced Fund W-ACC-GBP	£ 0.92	-	0.00	0.15
American Fund W-ACC-GBP	£ 52.47	-	-0.70	0.00
Cash Fund W-ACC-GBP	£ 1.03	-	0.01	0.00
Emerg Europe, Middle East and Africa Fund W-ACC-GBP	£ 1.66	-	-0.01	4.94
Sustainable Global Equity Fund W-ACC-GBP	£ 33.15	-	-0.23	0.00
Global High Yield Fund W-ACC-GBP	£ 13.32	-	0.06	5.84
Japan Fund W-ACC-GBP	£ 5.54	-	0.04	-
Japan Smaller Companies Fund W-ACC-GBP	£ 3.51	-	0.02	0.64
Select 50 Balanced Fund PI-ACC-GBP	£ 1.13	-	0.00	1.04
Special Situations Fund W-ACC-GBP	£ 42.03	-	0.05	2.08
Short Dated Corporate Bond Fund W-ACC-GBP	£ 10.37	-	0.01	-
Sustainable Water & Waste W-ACC-GBP	£ 1.14	-	0.00	0.15
Sustainable Water & Waste W-INC-GBP	£ 1.13	-	0.00	0.15
UK Select Fund W-ACC-GBP	£ 3.62	-	0.03	2.13
Global Enhanced Income W-ACC-GBP	£ 2.31	-	0.00	4.29
Index UK Gilt Fund P-ACC-GBP	£ 0.76	-	-0.01	0.59
Sustainable Multi Asset Conservative Fund W-ACC-GBP	£ 0.89	-	0.00	0.16
Sustainable Multi Asset Growth Fund W-ACC-GBP	£ 0.95	-	0.00	0.08

Findlay Park Funds Plc (IRL)
30 Herbert Street, Dublin 2, Ireland Tel: 020 7968 4900
FCA Recognised

Fund	Bid	Offer	D+/-	Yield
American EUR Unhedged Class	€ 155.13	-	-2.02	0.00
American Fund USD Class	$ 160.27	-	-2.01	0.00
American Fund GBP Hedged	£ 78.83	-	-0.98	0.00
American Fund GBP Unhedged	£ 136.58	-	-1.20	0.00

Foord Asset Management
Website: www.foord.com - Email: info@foord.com
FCA Recognised - Luxembourg UCITS

Fund	Bid	Offer	D+/-	Yield
Foord International Fund | R	$ 48.00	-	0.01	0.00
Foord Global Equity Fund (Lux) | R	$ 15.25	-	-0.04	0.00

Regulated

Fund	Bid	Offer	D+/-	Yield
Foord Global Equity Fund (Sing) | B	$ 18.16	-	-0.05	0.00
Foord International Trust (Gsy)	$ 46.78	-	0.00	0.00

GAM
funds@gam.com, www.funds.gam.com
Regulated

Fund	Bid	Offer	D+/-	Yield
LAPIS GBL TOP 50 DIV.YLD-Na-D	£ 130.14	-	-0.16	-
LAPIS GBL F OWD 50 DIV.YLD-Na-D	£ 102.46	-	0.21	-

Guinness Global Investors

Fund	Bid	Offer	D+/-	Yield
Guinness Global Equity Income Y GBP Dist	£ 18.98	-	0.02	2.34
Guinness Global Innovators Y GBP Acc	£ 25.76	-	-0.07	0.00
Guinness Sustainable Global Equity Y GBP Acc	£ 11.42	-	-0.09	0.00

HPB Assurance Ltd
Anglo Intl House, Bank Hill, Douglas, Isle of Man, IM1 4LN 01638 563490
International Insurances

Fund	Bid	Offer	D+/-	Yield
Holiday Property Bond Ser 1	£ 0.48	-	0.00	0.00
Holiday Property Bond Ser 2	£ 0.63	-	0.00	0.00

Janus Henderson Investors (UK)
PO Box 9023, Chelmsford, CM99 2WB Enquiries: 0800 832 832
www.janushenderson.com
Authorised Inv Funds

Fund	Bid	Offer	D+/-	Yield
Janus Henderson Instl UK Idx Opps A Acc	£ 1.10	-	0.00	3.13

M & G Securities (1200)F (UK)
PO Box 9038, Chelmsford, CM99 2XF
www.mandg.co.uk/charities Enq./Dealing: 0800 917 4472
Authorised Inv Funds

Fund	Bid	Offer	D+/-	Yield
M&G Charibond Charities Fixed Interest Fund (Charibond) Inc	£ 1.09	-	0.00	2.03
M&G Charibond Charities Fixed Interest Fund (Charibond) Acc	£ 38.91	-	-0.02	1.62
M&G Charity Multi Asset Fund Inc	£ 0.88	-	0.00	3.89
M&G Charity Multi Asset Fund Acc	£ 105.07	-	0.09	3.74

MMIP Investment Management Limited (GSY)
Regulated
Multi-Manager Investment Programmes PCC Limited

Fund	Bid	Offer	D+/-	Yield
UK Equity Fd Cl A Series 01	£ 2810.68	2842.19	142.84	0.00
Diversified Absolute Rtn Fd USD Cl AF2	$ 1583.93	-	-51.35	0.00
Diversified Absolute Return Stlg Cell AF2	£ 1468.42	-	-51.93	0.00
Global Equity Fund A Lead Series	£ 1721.66	1727.57	67.75	0.00

Marwyn Asset Management Limited (CYM)
Regulated

Fund	Bid	Offer	D+/-	Yield
Marwyn Value Investors	£ 329.72	-	-6.14	0.00

Milltrust International Managed Investments ICAV (IRL)
mimi@milltrust.com, +44(0)20 8123 8316 www.milltrust.com
Regulated

Fund	Bid	Offer	D+/-	Yield
British Innovation Fund	£ 121.92	-	2.89	0.00
MAI - Buy & Lease (Australia)	A$ 103.45	-	0.50	0.00
MAI - Buy & Lease (New Zealand)	NZ$ 91.20	-	-6.06	0.00
Milltrust Global Emerging Markets Fund - Class A	$ 86.71	-	-0.82	0.00

Milltrust International Managed Investments SPC
em@milltrust.com, +44(0)20 8123 8316, www.milltrust.com
Regulated

Fund	Bid	Offer	D+/-	Yield
Milltrust Alaska Brazil SP A	$ 79.82	-	2.33	0.00
Milltrust Laurium Africa SP A	$ 100.46	-	-0.53	0.00
Milltrust Marcellus India Fund	$ 127.34	-	-1.86	0.00
Milltrust Singular ASEAN SP Founders	$ 128.49	-	-0.13	0.00
Milltrust SPARX Korea Equity SP A	$ 101.92	-	-1.34	0.00
Milltrust Xingtai China SP A	$ 89.90	-	5.87	0.00
The Climate Impact Asia Fund SP (Class A)	$ 76.38	-	2.82	0.00
The Climate Impact Asia Fund (Class B)	$ 75.80	-	2.80	0.00

Mirabaud Asset Management (LUX)
www.mirabaud.com, marketing@mirabaud-am.com
Conviction based investment vehicles details available here www.mirabaud-am.com
Regulated

Fund	Bid	Offer	D+/-	Yield
Mir. - Glb Strat. Bd I USD	$ 112.36	-	0.62	-
Mir. - DiscEur D Cap GBP	£ 164.44	-	1.15	0.00
Mirabaud - UK Equity High Alpha	£ 139.47	-	-0.34	0.00

Oasis Crescent Global Investment Funds (UK) ICVC (UK)
Regulated

Fund	Bid	Offer	D+/-	Yield
Oasis Crescent Global Equity Fund USD A (Dist)	$ 34.19	-	-0.09	0.25
Oasis Crescent Global Income Fund USD A (Dist)	$ 9.90	-	0.03	2.74
Oasis Crescent Global Low Equity Fund USD D (Dist)	$ 12.07	-	-0.04	0.62
Oasis Crescent Global Medium Equity Fund USD A (Dist)	$ 13.40	-	-0.04	0.15
Oasis Crescent Global Property Equity Fund USD A (Dist)	$ 7.69	-	-0.15	0.98
Oasis Crescent Global Short Term Income Fund USD A (Dist)	$ 0.93	-	0.00	1.87
Oasis Crescent Variable Fund GBP A (Dist)	£ 9.77	-	0.00	0.18

Omnia Fund Ltd
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Estimated NAV	$ 946.10	-	-9.48	0.00

Orbis Investments (U.K.) Limited (GBR)
28 Dorset Square, London, NW1 6QG
www.orbis.com 0800 358 2030
Regulated

Fund	Bid	Offer	D+/-	Yield
Orbis OEIC Global Cautious Standard	£ 11.76	-	-0.01	0.00
Orbis OEIC Global Balanced Standard	£ 19.16	-	-0.04	-
Orbis OEIC Global Equity Standard	£ 21.62	-	-0.01	1.99
Orbis OEIC UK Equity Standard	£ 11.14	-	0.06	3.45

Platinum Capital Management Ltd
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Platinum All Star Fund - A	$ 143.77	-	-	-
Platinum Global Growth UCITS Fund	$ 8.46	-	0.21	0.00
Platinum Essential Resources UCITS Fund SICAV USD Class E	$ 11.91	-	0.24	0.00
Platinum Global Dividend UCITS Fund	$ 48.48	-	0.36	0.00

Polar Capital Funds Plc (IRL)
Regulated

Fund	Bid	Offer	D+/-	Yield
Automation & Artificial Intelligence CL I USD Acc	$ 14.35	14.35	-0.14	0.00
Asian Starts I USD Acc $	$ 13.57	-	0.06	0.00
Biotechnology I USD	$ 37.60	37.60	0.08	0.00
China Stars I USD Acc $	$ 10.15	10.15	0.18	0.00
Emerging Market Stars I USD Acc	$ 10.84	-	0.00	0.00
European Ex UK Inc EUR Acc	€ 13.82	13.82	0.02	-
Financial Opps I USD	$ 13.64	-	-0.12	2.74
Global Convertible I USD	$ 13.43	13.43	-0.09	0.00
Global Insurance I GBP	£ 9.99	-	-0.04	0.00
Global Technology I USD	$ 62.55	-	-0.53	0.00
Healthcare Blue Chip Fund I USD Acc	$ 17.79	17.79	-0.03	0.00
Healthcare Dis I Acc USD $	$ 11.85	-	-0.05	-
Healthcare Opps I USD	$ 62.31	-	-0.02	-
Income Opportunities B2 I GBP Acc	£ 2.90	2.90	0.00	0.00
Japan Value I JPY	¥ 139.20	139.20	0.28	0.00
North American I USD	$ 32.46	32.46	-0.28	0.00
Smart Energy I USD Acc $	$ 9.08	9.08	-0.05	0.00
Smart Mobility I USD Acc $	$ 8.63	8.63	-0.06	0.00
UK Val Opp I GBP Acc	£ 11.87	11.87	-0.08	0.00

Private Fund Mgrs (Guernsey) Ltd (GSY)
Regulated

Fund	Bid	Offer	D+/-	Yield
Monument Growth 01/11/2022	£ 544.17	549.50	15.00	1.11

Prusik Investment Management LLP (IRL)
Enquiries - 0207 493 1331
Regulated

Fund	Bid	Offer	D+/-	Yield
Prusik Asian Equity Income B Dist	$ 173.07	-	2.16	5.08
Prusik Asia Emerging Opportunities Fund A Acc	$ 177.05	-	-2.47	0.00
Prusik Asia Fund U Dist.	£ 211.32	-	-0.40	0.00
Prusik Asia Sustainable Growth Fund A Acc	$ 87.37	-	1.35	-

Purisima Investment Fds (CI) Ltd (JER)
Regulated

Fund	Bid	Offer	D+/-	Yield
PCG B ✠	279.94	-	4.24	0.00
PCG C ✠	272.38	-	4.12	0.00

Ram Active Investments SA
www.ram-ai.com
Other International Funds

Fund	Bid	Offer	D+/-	Yield
RAM Systematic Emerg Markets Eq	$ 204.18	204.18	-0.03	-
RAM Systematic European Eq	€ 507.11	507.11	0.87	-
RAM Systematic Funds Global Sustainable Income Eq	$ 146.19	146.19	-0.54	0.00
RAM Systematic Global Eq Sustainable Alpha	$ 107.19	107.19	-0.30	-
RAM Systematic Long/Short European Eq	€ 146.29	146.29	0.79	-
RAM Systematic US Sustainable Eq	$ 340.22	340.22	-3.59	-
RAM Tactical Global Bond Total Return	€ 137.35	137.35	0.21	-
RAM Tactical II Asia Bond Total Return	$ 139.45	139.45	1.18	-

Ruffer LLP (1000)F (UK)
65 Gresham Street, London, EC2V 7NQ
Order Desk and Enquiries: 0345 601 9610
Authorised Inv Funds
Authorised Corporate Director - Link Fund Solutions

Fund	Bid	Offer	D+/-	Yield
LF Ruffer Diversified Rtrn C Acc	106.32	-	0.01	0.85
LF Ruffer Diversified Rtrn C Inc	105.43	-	0.01	0.94
LF Ruffer European C Acc	739.72	-	14.83	0.85
LF Ruffer European C Inc	132.70	-	2.66	0.91
LF Ruffer European O Acc	717.28	-	14.34	0.55
LF Ruffer Equity & General C Acc	556.47	-	6.37	0.78
LF Ruffer Equity & General C Inc	502.75	-	5.76	0.79
LF Ruffer Equity & General O Acc	539.64	-	6.15	0.47
LF Ruffer Equity & General O Inc	496.54	-	5.66	0.48
LF Ruffer Gold C Acc	222.04	-	16.12	0.00
LF Ruffer Gold C Inc	134.39	-	9.76	0.00
LF Ruffer Gold O Acc	215.24	-	15.62	0.00
LF Ruffer Japanese C Inc	156.56	-	2.96	0.26
LF Ruffer Japanese C Acc	337.29	-	6.37	0.25
LF Ruffer Total Return C Acc	561.26	-	-2.55	2.45
LF Ruffer Total Return C Inc	350.04	-	-1.58	2.50
LF Ruffer Total Return O Acc	544.22	-	-2.50	2.46
LF Ruffer Total Return O Inc	339.21	-	-1.56	2.51

Rubrics Global UCITS Funds Plc (IRL)
www.rubricsam.com
Regulated

Fund	Bid	Offer	D+/-	Yield
Rubrics Emerging Markets Fixed Income UCITS Fund	$ 131.94	-	-0.27	-
Rubrics Global Credit UCITS Fund	$ 16.39	-	0.00	0.00
Rubrics Global Fixed Income UCITS Fund	$ 167.59	-	-0.10	0.00

Slater Investments Ltd (UK)
www.slaterinvestments.com; Tel: 0207 220 9460
FCA Recognised

Fund	Bid	Offer	D+/-	Yield
Slater Growth A Acc	653.04	653.04	0.06	0.00
Slater Income A Inc	139.72	139.72	1.06	5.22
Slater Recovery A Acc	336.98	336.98	0.35	0.00
Slater Artorius	290.07	290.07	3.80	0.32

Stonehage Fleming Investment Management Ltd (IRL)
www.stonehagefleming.com/gbi
enquiries@stonehagefleming.com
Regulated

Fund	Bid	Offer	D+/-	Yield
SF Global Best Ideas Eq B USD ACC	$ 215.15	-	-1.66	-
SF Global Best Ideas Eq D GBP INC	£ 278.20	-	-1.09	-

Superfund Asset Management GmbH
www.superfund.com, +43 (1) 247 00
Other International Funds
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Superfund Green Gold	$ 1233.01	-	-8.81	0.00
Superfund Green Silver	$ 1081.26	-	10.33	0.00

Regulated

Fund	Bid	Offer	D+/-	Yield
Superfund Green US$	$ 979.84	-	-11.35	0.00

Toscafund Asset Management LLP (UK)
www.toscafund.com
Authorised Funds

Fund	Bid	Offer	D+/-	Yield
Aptus Global Financials B Acc	£ 4.75	-	0.03	4.36
Aptus Global Financials B Inc	£ 3.07	-	0.02	4.51

Toscafund Asset Management LLP
www.toscafund.com

Fund	Bid	Offer	D+/-	Yield
Tosca A USD	$ 406.01	-	8.84	0.00
Tosca Mid Cap GBP	£ 170.45	-	1.07	0.00
Tosca Opportunity B USD	$ 261.12	-	2.32	0.00
Pegasus Fund Ltd A-1 GBP	£ 40.62	-	0.28	0.00

Troy Asset Mgt (1200) (UK)
65 Gresham Street, London, EC2V 7NQ
Order Desk and Enquiries: 0345 608 0950
Authorised Inv Funds
Authorised Corporate Director - Link Fund Solutions
Trojan Investment Funds

Fund	Bid	Offer	D+/-	Yield
Trojan Ethical O Acc	124.81	-	-0.35	0.00
Trojan Ethical Global Inc O Acc	101.49	-	-0.27	-
Trojan Ethical Global Inc O Inc	98.97	-	-0.27	-
Trojan Ethical O Inc	124.57	-	-0.34	0.00

Zadig Gestion (Memnon Fund) (LUX)
FCA Recognised

Fund	Bid	Offer	D+/-	Yield
Memnon European Fund - Class U2 GBP	£ 243.25	-	2.04	0.00

Data Provided by MORNINGSTAR®

www.morningstar.co.uk

Data as shown is for information purposes only. No offer is made by Morningstar or this publication.

Guide to Data

The fund prices quoted on these pages are supplied by the operator of the relevant fund. Details of funds published on these pages, including prices, are for the purpose of information only and should only be used as a guide. The Financial Times Limited makes no representation as to their accuracy or completeness and they should not be relied upon when making an investment decision.

The sale of interests in the funds listed on these pages may, in certain jurisdictions, be restricted by law and the funds will not necessarily be available to persons in all jurisdictions in which the publication circulates. Persons in any doubt should take appropriate professional advice. Data collated by **Morningstar**. For other queries contact **reader.enquiries@ft.com +44 (0)207 873 4211**.

The fund prices published in this edition along with additional information are also available on the Financial Times website, **www.ft.com/funds**. The funds published on these pages are grouped together by fund management company.

Prices are in pence unless otherwise indicated. The change, if shown, is the change on the previously quoted figure (not all funds update prices daily). Those designated $ with no prefix refer to US dollars. Yield percentage figures (in Tuesday to Saturday papers) allow for buying expenses. Prices of certain older insurance linked plans might be subject to capital gains tax on sales.

Guide to pricing of Authorised Investment Funds: (compiled with the assistance of the IMA. The Investment Association, Camomile Court 23 Camomile Street, London EC3A 7LL. Tel: +44 (0)20 7831 0898.)

OEIC: Open-Ended Investment Company. Similar to a unit trust but using a company rather than a trust structure.

Different share classes are issued to reflect a different currency, charging structure or type of holder.

Selling price: Also called bid price. The price at which units in a unit trust are sold by investors.

Buying price: Also called offer price. The price at which units in a unit trust are bought by investors. Includes manager's initial charge.

Single price: Based on a mid-market valuation of the underlying investments. The buying and selling price for shares of an OEIC and units of a single priced unit trust are the same.

Treatment of manager's periodic capital charge: The letter C denotes that the trust deducts all or part of the manager's/operator's periodic charge from capital, contact the manager/operator for full details of the effect of this course of action.

Exit Charges: The letter E denotes that an exit charge may be made when you sell units, contact the manager/operator for full details.

Time: Some funds give information about the timing of price quotes. The time shown alongside the fund manager's/operator's name is the valuation point for their unit trusts/OEICs, unless another time is indicated by the symbol alongside the individual unit trust/OEIC name.

The symbols are as follows: ✠ 0001 to 1100 hours; ◆ 1101 to 1400 hours; ▲ 1401 to 1700 hours; # 1701 to midnight. Daily dealing prices are set on the basis of the valuation point, a short period of time may elapse before prices become available. Historic pricing: The letter H denotes that the managers/operators will normally deal on the price set at the most recent valuation. The prices shown are the latest available before publication and may not be the current dealing levels because of an intervening portfolio revaluation or a switch to a forward pricing basis. The managers/operators must deal at a forward price on request, and may move to forward pricing at any time. Forward pricing: The letter F denotes that that managers/operators deal at the price to be set at the next valuation.

Investors can be given no definite price in advance of the purchase or sale being carried out. The prices appearing in the newspaper are the most recent provided by the managers/operators. Scheme particulars, prospectus, key features and reports: The most recent particulars and documents may be obtained free of charge from fund managers/operators. * Indicates funds which do not price on Fridays.

Charges for this advertising service are based on the number of lines published and the classification of the fund. Please contact **data@ft.com or call +44 (0)20 7873 3132** for further information.

FT FINANCIAL TIMES

MANAGED FUNDS SERVICE

Promote your brand, communicate with clients and attract new institutional & retail investors.

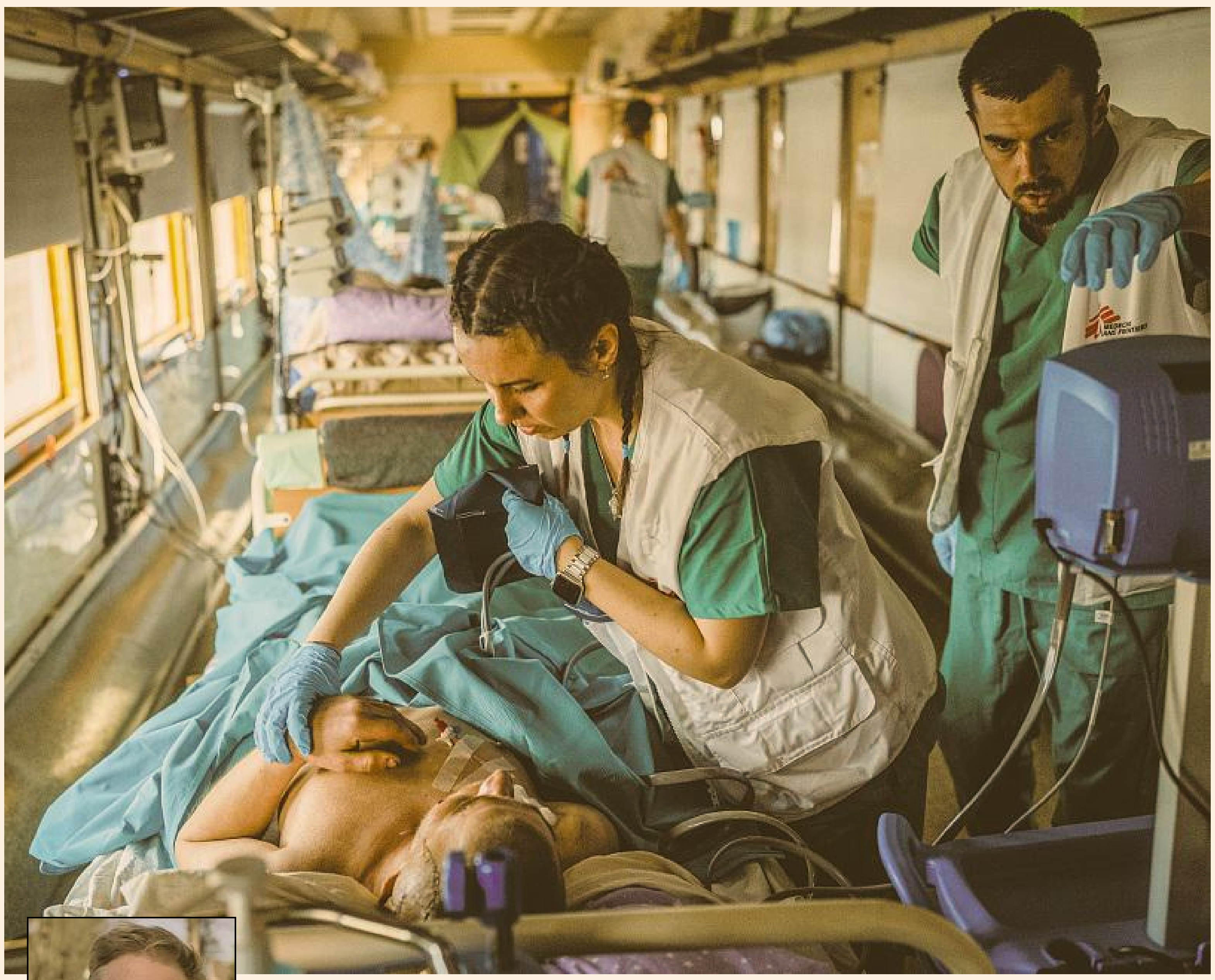
Advertising enquiries: **data@ft.com**

ft.com/funds

CONFLICT APPEAL

MEDECINS SANS FRONTIERES
DOCTORS WITHOUT BORDERS

HELP US DELIVER MEDICAL CARE BEYOND THE FRONTLINES



An MSF medic treats a patient onboard the medical train. Photograph © Andrii Ovod/MSF

23 October 2022

CHRISTOPHER STOKES IS COORDINATING MSF'S MEDICAL WORK IN UKRAINE

"On 10 October I had just left the train station in Dnipro, eastern Ukraine, when the car suddenly started shaking. A second later, we heard the blast from the first missile. By the time we reached the office, we'd felt four more shockwaves from strikes. Since then, there have been regular waves of bomb attacks targeting infrastructure and civilian areas. Yesterday there were more hits close to where we were working.

We're now gearing up for the very real possibility that the electricity will go off across the whole of Ukraine as a result of these ongoing attacks. That will have drastic knock-on effects on hospitals, healthcare and people's lives. People are heading into winter with the risk there will be no electricity, heating or hot water.

We're doing our best to prepare. We're helping a number of hospitals near the frontline get ready. We're running mobile clinics in areas previously under Russian occupation where people have had no access to the medicines they need for months.

MSF operates a specially designed medical train that evacuates patients from near the frontlines of the fighting to safer areas and we're looking at ways to keep that running, even if the electricity fails. It's been kitted out by MSF and Ukrainian Railways with an intensive care unit and inpatient carriages. To date, we've evacuated 1,851 patients in 60 trips, most of them suffering from blast injuries and shrapnel wounds.

Last weekend we carried one family on the train who needed to be evacuated from the war zone. They had returned to their home in Nikopol on 5 October after having fled the war months earlier. On 6 October, just one day after returning, their house was hit by a shell. The father suffered minor injuries, but one of his daughters was badly injured and ultimately had to have both legs amputated. She was only six years old.

The Ukrainians are doing the vast bulk of the medical work in this war. Our role is about filling the gaps, whether that's supplying ambulances, running the medical train or providing medicines to people cut off from healthcare. With these latest attacks, people's medical needs are growing, and it's vital we are here."

MSF'S WORK IN CONFLICTS

In conflicts around the world, MSF teams are working around the clock to treat trauma injuries, conduct surgeries and provide lifesaving medical care to the victims of bombings and indiscriminate attacks.

Yet our work involves much more than frontline trauma care. Conflict has a devastating ripple effect on all aspects of healthcare. In countries such as Ukraine, Yemen and South Sudan, MSF is saving lives beyond the frontlines. We're running nutritional programmes for malnourished children, treating infectious diseases and helping women to give birth safely.

£47	could provide a folding stretcher for transporting injured patients
£456	could cover the cost of an MSF doctor working in a field hospital for six days
£194	could pay for a sustenance kit to help mothers provide babies with essential nutrition

THANK YOU

100% of funding for our work comes from private donors. It's your support that enables us to continue providing medical care.

DONATE NOW

CALL 0800 055 79 84

Or search 'MSF CRISIS'
to make an online donation

This appeal will fund MSF's work in conflicts where people are in urgent need of medical care.

PLEASE DONATE TODAY TO HELP DELIVER MEDICAL CARE BEYOND THE FRONTLINES

YES, I would like to support MSF's Conflict Appeal

I WOULD LIKE TO MAKE A DONATION OF £ ☐

Please make your cheque/charity voucher payable to Médecins Sans Frontières UK

OR ☐ Please charge my VISA/Mastercard/Amex/CAF card:

Cardholder name

Card number | Expiry date /

Signature | Today's date / /

Title | Forename(s)

Surname

Address

Postcode

Telephone

Email

Please fill in this form, place in an envelope and return postage free to:
FREEPOST RUBA-GYZY-YXST, Médecins Sans Frontières (MSF), Bumpers Way, Bumpers Farm, Chippenham, SN14 6NG. Alternatively, you can phone **0800 055 79 84** (open 8am – 10pm 7 days a week) or make your donation online by searching **'MSF CRISIS'**.

ARE YOU A UK TAXPAYER?

giftaid it

If so, you can make your gift worth 25% more at no extra cost. Please tick the box below.

☐ I wish Médecins Sans Frontières (MSF) to treat all gifts in the last 4 years, this gift and all future gifts as Gift Aid donations. I am a UK taxpayer and understand that if I pay less Income Tax and/or Capital Gains Tax than the amount of Gift Aid claimed on all my donations in that tax year it is my responsibility to pay any difference.

Date / /

NB: Please let us know if your name, address or tax status changes, or if you would like to cancelthis declaration, so that we can update our records.

RESPECTING YOU AND YOUR PERSONAL DATA

Your support is vital to our work and we would like to keep you informed with first-hand accounts from our staff and patients about the lifesaving impact your support is having, from combatting epidemics to providing emergency surgery.

We won't allow other organisations to have access to your personal data for marketing purposes and we won't bombard you with appeals.

By supporting MSF, you will receive our quarterly magazine Dispatches, event invitations and occasional emergency appeals with requests for donations by post. You can change how you hear from MSF UK by emailing **uk.fundraising@london.msf.org** or calling **020 7404 6600.** Visit our privacy notice for more: **msf.org.uk/privacy.**

101808

HEAR FROM MSF BY EMAIL. Sign up to our monthly email, Frontline, which provides first-hand accounts of our work. You will receive Frontline, occasional emergency appeals, requests for donations and event invitations.

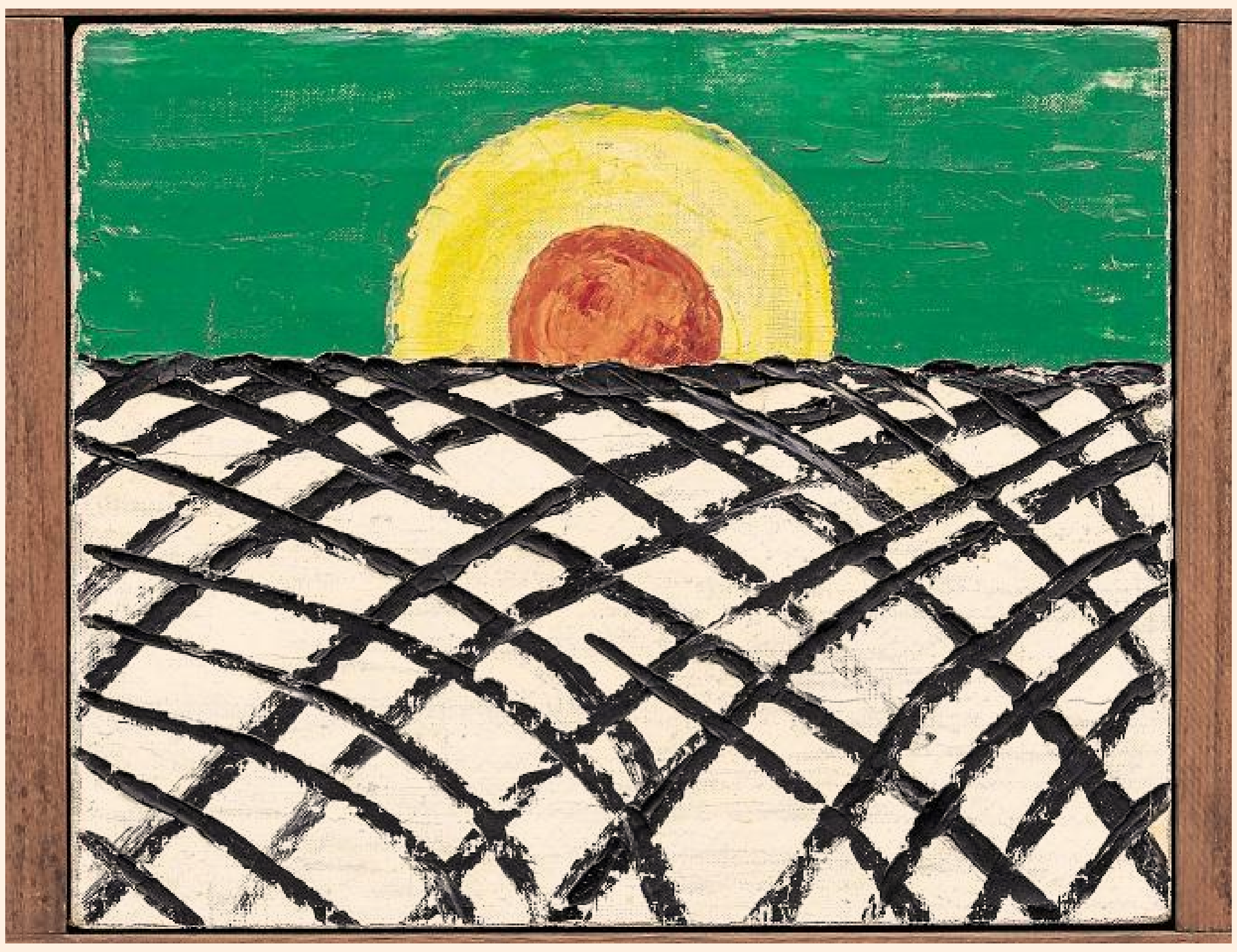
☐ Opt me in to email

Charity Registration Number 1026588

MSFR0048

ARTS

First major UK exhibition of American artist Forrest Bess is a compelling Camden Art Centre show. By Sam Moore



Painter of the in-between

At first glance, Forrest Bess's 1946 painting "Untitled (The Dicks)" looks nothing like its title suggests. One of his earliest visionary paintings — inspired by images that occurred to Bess in moments between waking and sleeping — it is a pattern of ovals in orangey yellow, a few flecks of the canvas's black background left untouched.

This is one of the first works encountered in *Out of the Blue*, a retrospective at Camden Art Centre in north London for the mid-20th-century American painter and the first major institutional exhibition of his work in the UK. The piece captures Bess at his most compelling and enigmatic; his work comes to life when it exists at an uncertain point between abstract and figurative, between the real world and the artist's subconscious.

While painting was a fixture throughout Bess's life, he was never a full-time artist. Born in Bay City, Texas, in 1911, he began painting as a teenager. In 1931 he enrolled to study architecture at the University of Texas, but found himself drawn to texts on religion, psychology and anthropology, which would come to define his work. After dropping out of college in 1932 and working in oilfields, he set up a painting studio two years later in Bay City. After the second world war, during which Bess enlisted in the Army Corps of Engineers, he returned to a fishing camp in Chinquapin. It was here that he developed the symbolic, personal work that came to define him.

Despite Bess's personal visual language, informed by life as a gay man in rural Texas, and despite his radical ideas about sex and gender, his work was shown during the 1950s and 1960s in the mainstream Betty Parsons Gallery, which represented abstract artists like Mark Rothko and Jackson Pollock. It's tempting to see Bess's work in the context of those contemporaries, but the range of sources he drew on, from eastern spirituality to a (largely one-sided) correspondence with psychoanalyst Carl Jung, makes him singular.

Some paintings explicitly capture his mental landscape. Another early work, 1947's "Untitled (The Crowded Mind/The Void)" presents a series of symbols (shapes, the sun, an aeroplane) with a chunk of the canvas cut off by a wave of black, as if there are ideas the artist is unable to render. Some of these symbols recur like signs on a map — arrows and triangles, leading your eye somewhere far beyond the gallery — as Bess tries to make sense of uncharted territory that is both physical and metaphysical.

Above: Forrest Bess's 'Untitled (No. 7)', 1957 Below: 'Untitled (No. 6)', 1957 — Collection of Christian Zacharias, Robert Glowacki, courtesy of Modern Art, London

Bess's work feels transitional, not only in the way that it moves between states of consciousness and unconsciousness, but in how he tried to make sense of his body through art and medical intervention. Through surgery, Bess became what was known then as a "pseudo-hermaphrodite" — having, in his case, biologically male chromosomal tissue but the external genitalia of someone biologically female. (The term is outdated: "intersex" is now preferred.)

For Bess, this was vital for reaching a state of what he considered to be transcendence. His work gestures towards this: "Tree of Light/Sign of the Hermaphrodite" (1953) offers the first half of its title like a fork in the road, black branches on a grey background. But at the midpoint of the canvas, it moves towards a more abstract space: a golden background, with Bess's fireball-like "sign of the hermaphrodite" aligned with the branches. It gives a sense of the

> Bess's work moves between states of consciousness and unconsciousness

known world disappearing as Bess tries to make sense of it through something more abstract. The motifs that keep his work grounded in the real world are the best way to make sense of the subjective realm the artist kept returning to, fragments of an incomplete map.

There's something fitting about the final painting in the exhibition, "Here is a Sign" (1970): its yellow arrows on black feel like a road sign as they point towards a dead end, finally turning in circles. Like the artist himself, his paintings linger somewhere in between, uncertain and out of reach.

To January 15 2023, camdenartcentre.org

CLASSICAL

The Rape of Lucretia; London Philharmonic Orchestra
Linbury Theatre, London;
Royal Festival Hall, London

Richard Fairman

The ancient Roman story of Sextus Tarquinius raping the noblewoman Lucretia has acquired a prestigious cultural heritage. Raphael, Titian, Rembrandt and others have painted scenes from it. Shakespeare took it as the subject for a long narrative poem.

It should have been possible to turn the same plot into an opera less hobbled by problems than those created by the libretto given to Benjamin Britten by Ronald Duncan. Its combination of sexism, an implausible Christian framework and a fondness for over-florid poetry bordering on the incomprehensible causes obstacles for all involved.

This co-production between the Royal Opera and Britten Pears Arts, first seen in Aldeburgh last month, does its best to cut through the difficulties. The director, Oliver Mears, has updated the story to a present-day war zone, where soldiers fresh from the action shatter the tranquillity of Lucretia's suburban living room. The atmosphere of conflict is stifling, as a woman is brutally beaten and Tarquinius seems to be suffering from PTSD. The opera's problems may not have been solved, but the in-your-face immediacy established from the start of this staging compels attention.

The cast is drawn from the Royal Opera's Jette Parker Artists Programme and Britten Pears Young Artists Programme. In the Linbury Theatre, perfectly sized for Britten's first chamber opera, and with an acoustically helpful set, the young singers enjoy beneficial surroundings. Anne Marie Stanley makes a noble Lucretia with a deep mezzo suitable for a role first sung by Kathleen Ferrier, and there is a well-contrasted pair of male leads in Jolyon Loy's towering Tarquinius and Anthony Reed's slightly stiff Collatinus. All came across well vocally, as they should in this theatre, and Corinna Niemeyer conducted a tense performance with some scorching playing from the Aurora Orchestra.
★★★★☆
To November 22, roh.org.uk

In recent years Britten's operas have been enjoying more performances internationally, part of a greater openness generally to 20th-century music.

Even so, the most recent London Philharmonic Orchestra programme at the Royal Festival Hall was unusually adventurous.

It opened with the premiere of a new piano concerto by the Polish composer Agata Zubel, a near half-hour of sonic exploration. The work's unique selling point is that the soloist plays two pianos, one tuned a quarter-tone lower than the other.

This reflects Zubel's interest in microtonal music, though the maximum impact is only heard when both pianos are being played simultaneously. The framework is a standard classical concerto, into which Zubel pours whirlwinds of sound and an eerie slow movement. Tomoko Mukaiyama was the soloist.

The Polish link led to the Symphony No 4 by Lutosławski, a fast-moving kaleidoscope of glittering textures, incisive rhythms and wisps of melody. This was the last of Lutosławski's symphonies and it may be that only a composer with a lifetime's experience could devise a symphony that is so constantly on the move. Edward Gardner, LPO principal conductor, guaranteed an impressively crisp performance and the concert ended with Stravinsky's *The Rite of Spring*, strangely balanced with strings prominent and weak woodwind, but its power was undeniable. ★★★★☆
lpo.org.uk

Anne Marie Stanley makes a noble Lucretia

Slay gods, fight bosses and hold hands

GAMING
Tom Faber

Autumn is usually the busiest time of the year for gaming, as cold evenings grow longer and fantasy worlds become ever more enticing. Game companies often save their biggest releases for this season. Yet 2022 has so far been unexpectedly quiet, partly because of the effects of the pandemic on development, with big hits such as *Starfield*, *Hogwarts Legacy* and *The Legend of Zelda: Tears of the Kingdom* delayed to next year.

One new game, however, was always going to cause a splash. *God of War: Ragnarök* is Sony's biggest release of the year. Where the series originated in gory, irreverent action games about slaying gods and monsters, the franchise was given a reboot redolent of prestige TV in 2018, recasting hero Kratos from bawdy warrior to a grieving widower embarking on a funeral procession alongside a son he struggles to understand.

While that game was revolutionary, the sequel aims for refinement and expansion. Kratos and his son Atreus travel across nine Nordic realms, all more open for exploration than before, solving environmental puzzles and eviscerating supernatural beasties. Combat feels tense, with options to customise your fighting style. Then there are the exhilarating boss fights in which you might rocket skywards through storm clouds before landing, spitting out teeth and jumping back into the fray.

This cinematic style carries through to the game's lengthy narrative. Here is a rich stew of family drama and divine melodrama, with comic relief provided by Mimir, who is charming and chatty despite being a decapitated head. Kratos is almost comically laconic, so tough that he puts bears into headlocks, while his son has grown into a teen who can now strip a deer carcass all by himself, thank you very much. As Atreus realises the extent of his own supernatural powers, he draws away from his father. Despite the thrilling fights, their relationship is the heart of this game, the themes explored even more eternal than fate and divine retribution — growing up and letting go.

Troubled families are also at the heart of *A Plague Tale: Requiem*, the follow-up to 2019's cult hit *Innocence* and a beneficiary of the relatively quiet autumn release schedule. Protagonist Amicia de Rune spent the last game trying to escape the evil Inquisition across plague-struck 14th-century France, all while trying to lift a curse from her little brother Hugo. We still see the pair's affection in attentive animations, such as when Amicia holds Hugo's hand as they walk through fields of lavender.

But beautiful locations give no hint of the gruesome imagery to come, which befits the game's title. Piles of bodies are stacked up against stone walls and rats swarm into every shadow. Meanwhile human enemies easily overpower you. This game makes you feel vulnerable, emphasising stealth. You have to be smart, using Amicia's sling and alchemical concoctions to progress. When you *do* kill, the game underlines the gravity of that brutality. It is most compelling when these concerns fray the relationship between the siblings, who have seen much suffering.

If that sounds a little heavy for escapism, Nintendo's big release of the season takes the opposite approach. *Bayonetta 3* eschews an emotional story in favour of satisfying action sequences. It's the latest in a beloved series about a badass librarian witch who battles angels as well as demons. Her combat-couture outfits are made of her own hair, which lifts away from her body, exposing more flesh as her magic power increases, parodying the male gaze.

In the game, you can crash a mega-yacht party, chase villains across Tokyo high-rises and even dive into unexpected gameplay shifts, where the game transforms into a rhythm-action challenge or 2D stealth sequence. Whatever the case, Bayonetta seals the deal by blowing a kiss after she's turned the baddies to dust. There is something to get gamers through the lean winter months, whatever their taste.

'God of War: Ragnarök' is Sony's biggest gaming release of the year

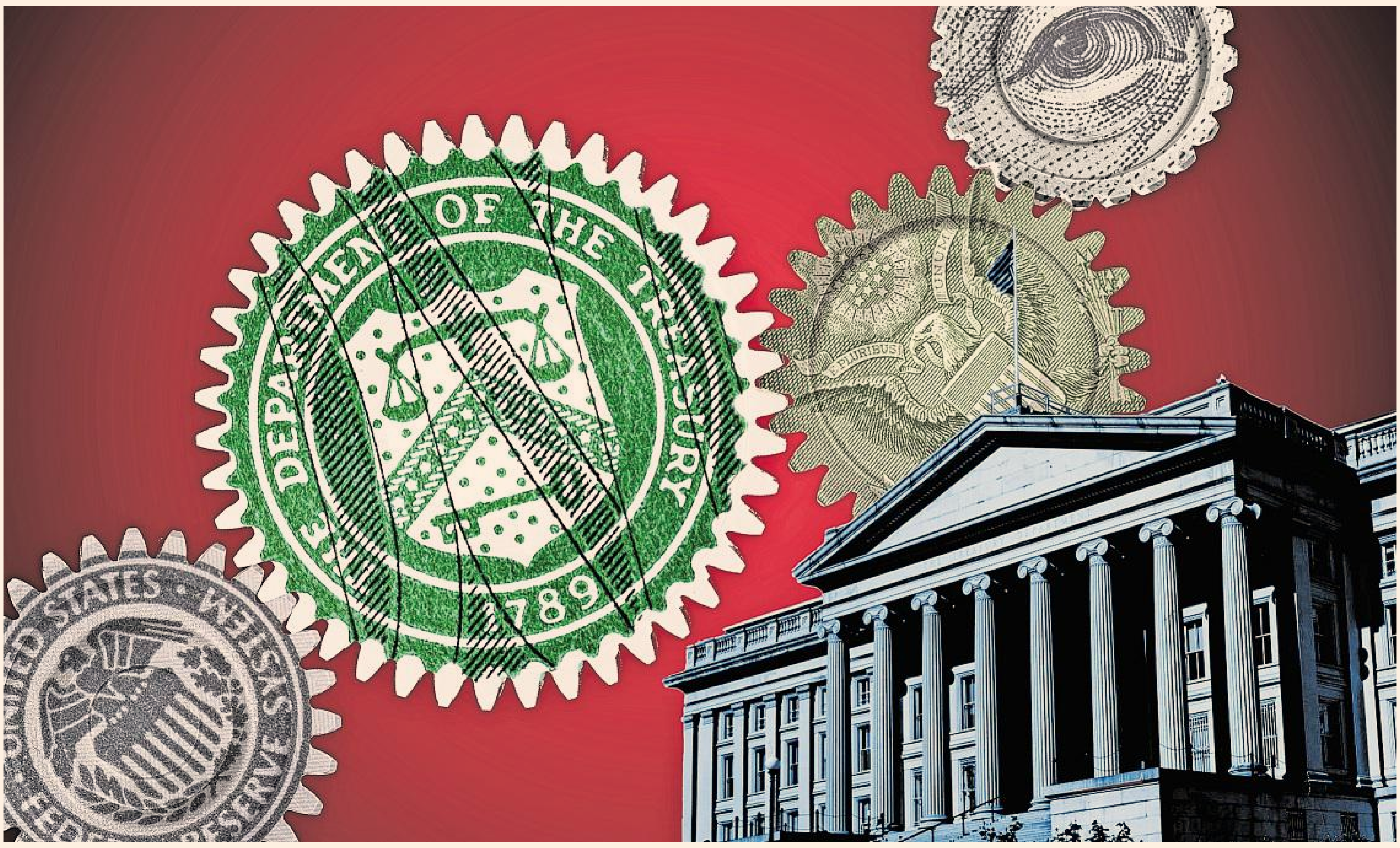
Strategic Sponsor
rubix
Lead Sponsors
GSR LMAX GROUP OKX ripple
Associate Sponsor
chia

FT BIG READ. FINANCIAL REGULATION

The meltdown in UK gilts exposed the vulnerability of large bond markets. With its currently 'terrible' levels of liquidity, could the biggest of them all survive a wave of selling?

By Kate Duguid and Tommy Stubbington

The fragile US Treasury bond market



US regulators have unveiled a slew of measures aimed at improving the functioning of the Treasury market and its resilience
FT montage: Bloomberg

Buying and selling in the world's biggest bond market is supposed to be easy. However, for most of this year, says Gregory Whiteley, a bond portfolio manager at DoubleLine Capital, it has been anything but straightforward.

Whiteley says a trader used to be able to get hold of $400mn of US Treasury bonds — not an outsize quantity in this $24tn market — as a routine matter. But now that typically involves breaking up the order into smaller chunks; perhaps doing $100mn of the trade electronically, he explains, and then picking up the phone to see if they can prise the rest of the debt from the hands of Wall Street's trading desks over the course of a day.

The US Treasury bond market suffered a huge scare at the start of the coronavirus pandemic when fears about a collapse in the global economy led to a sudden slump in prices and liquidity.

Now as the Federal Reserve battles to rein in inflation, a recession looms and most asset prices have faced a dramatic sell-off, the world's most important bond market is creaking once again.

Liquidity in the market — one crucial measure of how well it is functioning — is at its worst levels since March 2020 after a dramatic decline in the past year. Market depth, a measure of liquidity that refers to the ability of a trader to buy or sell Treasuries without moving prices, is also at its worst level since March 2020, according to Jay Barry at JPMorgan.

> 'It seems as if market functioning has become a bigger source of risk, rather than just reflecting the uncertain [climate]'

"Markets are in a much more fragile place, with terrible liquidity," says Greg Peters, co-chief investment officer at PGIM Fixed Income. "The way I think about fragile market function is that the odds of a financial accident are just higher."

All this was happening even before the recent meltdown in UK government debt, which has added to the anxiety about the vulnerability of the world's large bond markets.

While investors are not concerned about an exact replay of the UK crisis, in which pension funds placed leveraged bets on the direction of bonds at a large scale, many fear that an unforeseen wave of selling could quickly overwhelm the US bond market's shaky infrastructure.

"The wobble in the gilts market was a fire drill for everyone else," says Steven Major, global head of fixed income research at HSBC. In some cases, investors say, a lack of liquidity is driving volatility in US bond prices, rather than the other way round.

Regulators have unveiled a slew of measures aimed at improving the functioning of the market. Today, at an important annual conference hosted by the New York Fed, officials will discuss with industry leaders ongoing efforts to improve the market's resilience.

"My assessment is that markets are well functioning, trading volumes are large, traders are not having difficulty executing trades," Janet Yellen, the US Treasury secretary, said at the end of October in a speech on the subject. Reforms were being developed to "improve the Treasury market's ability to absorb shocks and disruptions, rather than to amplify them", she said.

The Securities and Exchange Commission has put forward two ambitious proposals to improve the market's resilience, while the Treasury has been consulting on a proposal to buy back illiquid bonds.

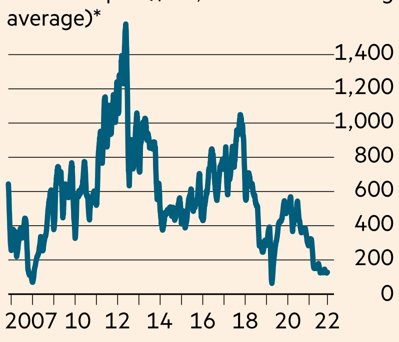
The Fed has stepped in to stabilise markets during previous crises, such as in March 2020, and ultimately it could suspend its ongoing efforts to sell down some of the securities on its balance sheet or even restart its quantitative easing programme if the situation demanded, investors believe.

But the sense of vulnerability around the US Treasury market is a matter of vital concern given that everyone, from pension funds to foreign governments, puts their money in the market for safekeeping, making it the world's de facto borrowing benchmark.

Any sustained problems or a collapse in prices would have global consequences, ricocheting through stocks, corporate bonds and currencies.

Hard to trade in Treasuries: liquidity has deteriorated ...

Market depth ($mn, one-month moving average)*

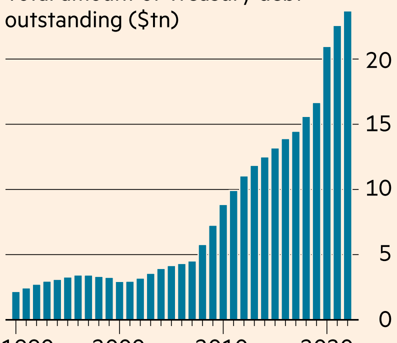


*JPMorgan metric of depth in two-, five-, 10- and 30-year Treasuries, converted to 10-year equivalents

Source: JPMorgan

... in a market that has become vastly larger

Total amount of Treasury debt outstanding ($tn)

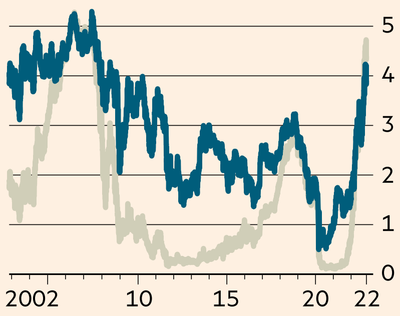


2022 is as of October

Source: Sifma

Yields have soared as the Fed has aggressively raised interest rates

US Treasury yield (%)



Source: Refinitiv

"It's not simply the fact of having shit liquidity . . . it's also what that implies for financial regulation, which is singularly premised on Treasuries being able to be sold easily," says Yesha Yadav, a professor at Vanderbilt Law School who researches Treasury market regulation. "If you can't guarantee that because liquidity is not working as it should be, I think that does imply something, not just about Treasury market stability, but about broader financial market stability."

Volatility and liquidity

Investors acknowledge that liquidity in the Treasury bond market was bound to deteriorate this year, regardless of the mechanics of the market.

Treasury yields, which move with interest rates, have been much more volatile than usual as the Fed has aggressively tightened monetary policy. Amid so much uncertainty, it was inevitable that it would be harder and more expensive to trade. And while the cost and difficulty with which investors trade in Treasuries has risen, trading volumes have remained steady through 2022, according to data from Sifma, the securities industry's trade group.

"As volatility goes up, it is only natural for the cost of transactions to go up. Volatility has gone up significantly, as we've seen the Fed hike rates in 75 basis point increments at an unprecedented pace," says Isaac Chang, head of global fixed income trading at Citadel. "Liquidity concerns need to be viewed in that context."

Increased volatility tends to lead to reduced liquidity in the market. However, for some seasoned observers of US Treasuries, the causal relationship has begun to swing in the opposite direction, where illiquidity is now driving some of the volatility.

Brian Sack, the director of economics at hedge fund DE Shaw, was the vice-chair of the Treasury Borrowing Advisory Committee until August of this year. The committee makes recommendations to the Treasury about how much and what it should borrow, and in May delivered a report about liquidity issues in the market.

"For much of the year there we've seen concerns about Treasury market functioning, but for a time this appeared mostly driven by the volatility of yields arising from fundamental developments," says Sack.

"In recent months, however, liquidity in the Treasury market has deteriorated further. This recent development is more concerning, as it seems as if market functioning has become a bigger source of risk, rather than just reflecting the uncertain fundamental environment."

For most analysts, the liquidity problems in the Treasury market are not just about rapidly changing prices, they are also a reflection of a dearth of buyers, or an inability or unwillingness of the buyers in the market to mop up all the supply.

The fact the Treasury department has begun discussing the prospect of buying back some of the most illiquid Treasury bonds, says HSBC's Major, is an implicit acknowledgment that faltering demand has begun to cause problems.

One reason for the new questions about demand has been that the Treasury market has ballooned in size in recent years and the biggest buyers of that debt, most notably the Fed and the Bank of Japan, are stepping back. The Fed has been pulling back from the Treasury market as part of its quantitative tightening programme. And the Bank of Japan — guided by the policies of the Ministry of Finance — has been selling some of its foreign bond holdings, thought to consist largely of Treasuries, to support the yen against the strong dollar.

Higher rates could cause the Treasury market to expand further. "The overall Treasury market is going to grow dramatically in order to pay the interest rates," says Chris Concannon, president of trading platform MarketAxess. "To pay the rates, you're going to see sizeable growth just to fund the payments required."

The retreat of major buyers in the Treasury market has also been a function of regulations introduced following the financial crisis that have made it more expensive for primary dealers — the banks that buy bonds directly from the Treasury, and have been a traditional provider of liquidity — to hold Treasuries.

As primary dealers have limited their role, high-speed traders and hedge funds have taken their place to provide much-needed liquidity. These investors are less regulated and have behaved differently from how primary dealers did. Market watchers say there have been important moments of instability in the market where high-speed traders have pulled back from providing liquidity.

The involvement of hedge funds and high-speed traders has also injected more leverage into the market — a factor that exacerbated the market crisis in March 2020. As panicked investors were selling Treasuries, hedge funds in leveraged bets known as the basis trade that sought to exploit small anomalies in bond prices were forced to unwind their positions, accelerating the sell-off.

Whether there are similar pools of leverage in Treasuries at present is hard to assess. Trading in Treasuries is opaque and information about positioning, especially among non-banks, is hard to come by. The data that is available — such as that cited in the Fed's financial stability report — is only published with a delay of several months.

The latest report notes that measures of hedge fund leverage are above historical averages. "These gaps [in receiving the data] raise the risk that such firms are using leveraged positions, which could amplify adverse shocks, especially if they are financed with short-term funding," the report said.

The regulators get serious

Amid such concern, regulators have been eager to point out that the market has not been disrupted.

In spite of the high volatility and poor liquidity this year, there have been no signs of forced selling of major leveraged positions. The enormous attention focused on the market also means that any signs of problems could be picked up fairly quickly, even if transparency in Treasury market data is notoriously poor.

In addition to the discussion about possible buybacks of illiquid bonds, at least one Fed governor has mentioned the possibility of easing some of the capital requirements on big banks, which would free their balance sheets to hold more Treasuries.

> '[Reforms will] improve the Treasury market's ability to absorb shocks and disruptions, rather than to amplify them'

Janet Yellen, above

There have also been proposals trying to improve the functioning of the market. Indeed, the proposals put forward by the SEC could represent the biggest changes in US market regulation since the 2010 Dodd-Frank act.

The two main proposals would regulate non-bank players in the Treasury market in similar ways to banks. The first, known as the dealer rule, would require any Treasury market participant trading more than $25bn a month to register as a dealer, forcing them to be more transparent about their trading and positions and increasing their capital requirements.

The second proposal would require more trades to be centrally cleared, meaning more deals in the Treasury market would have to be guaranteed by a third party, and the participants in the deal would have to have more cash on hand to place the bets.

The international Financial Stability Board, which makes recommendations to the G20 nations on financial rules, said in a report from October that increasing the capital cushion required of non-bank liquidity providers and encouraging central clearing could help to stabilise core markets such as Treasuries in moments of poor liquidity.

The SEC's central clearing proposal has not provoked much backlash, but the dealer rule has. Hedge funds in particular have said that the rules are so sweeping they would affect funds that trade in the Treasury market on a regular basis to manage their risk, in addition to those placing speculative trades. What's more, hedge funds typically have small balance sheets and borrow to make bets, and the new capital requirements would fundamentally change the business model of these firms.

These changes are so significant that some hedge funds have threatened to pull out of the market entirely, which would exacerbate the liquidity problems the market is facing.

"The SEC's dealer rule imposes an unworkable regulatory structure that would cause many funds to reduce or cease their Treasury trading activity," says Bryan Corbett, chief executive of Managed Funds Association. "The rule will lead to greater concentration, fewer market participants, and increased volatility, which is the opposite of the SEC's stated objective."

If that leads to reduced participation by these investors in the Treasury market, then new buyers for US government debt will need to be found, especially after the rules come into effect in the coming years.

"It is possible that the real risk will only come after a year of QT [quantitative tightening] and a year of increased private absorption of Treasuries because a new set of holders will have to be found, and maybe some of those turn out to be weak hands," says Brad Setser, a fellow at the Council on Foreign Relations and a former Treasury official under President Barack Obama.

Ultimately, a large-scale Treasury market crisis would probably lead to an intervention by the Fed — just as in the UK, the Bank of England temporarily halted its quantitative tightening programme to backstop the market.

However, a market in which the Fed is regularly forced to intervene is also not one that communicates the kind of stability and security that investors around the world depend on.

"If there were to be the kind of disruption that we've seen in the gilts market in the Treasury market, there would be a bigger global impact just because the Treasury market is so much more important globally," says Setser.

The FT View

FINANCIAL TIMES
'Without fear and without favour'

ft.com/opinion

COP27 puts the spotlight on Egypt's human rights record

Western capitals should use diplomatic and economic leverage with President Sisi

If Egypt's president Abdel Fattah al-Sisi assumed he could use the COP27 to strut the global stage and project a varnished version of his leadership to his domestic audience, he has been proven wrong. Instead, the ugliest elements of the autocrat's rule have been thrust into the spotlight as world leaders wrangle over climate change in Sharm el-Sheikh.

By default, the UN meeting has given rare space for Egyptian civil society to voice to the world its anger over the appalling human rights record of Sisi's regime. COP27 delegates should listen to activists' anguished tale and use the moment to pressure Sisi.

There is much at stake. Even as Sisi has schmoozed with presidents and prime ministers, the clock has been ticking on the life of one of the country's most prominent political prisoners, Alaa Abdel Fattah. The activist, who has spent eight of the past 10 years behind bars, had been on a partial hunger strike for more than 200 days.

He stopped drinking water when COP27 opened, triggering serious concerns about how long he could survive. His most recent "crime" was spreading "false news that undermines national security" on a social media post. His conviction in December earned him another five years in prison. Abdel Fattah said in a letter to his mother on Tuesday he had suspended his hunger strike and would give more detail during her monthly visit on Thursday.

He is but one of thousands of political prisoners detained since Sisi's 2013 coup. Amnesty International said Cairo had arrested 1,500 people since April, including hundreds in the two weeks leading up to COP27 in connection with calls for protests during the summit. Make no mistake, Sisi presides over one of the most oppressive regimes in a region replete with autocrats.

Weeks after Sisi's putsch toppled Islamist Mohamed Morsi, the country's first democratically elected president, security forces killed at least 800 Muslim Brotherhood members and supporters in a crackdown at the Rabaa al-Adawiya mosque. Thousands more people with links to the brotherhood were imprisoned as Sisi branded the Islamist movement a terror group. His regime went on to crush all forms of dissent, banning protests and detaining secular activists, bloggers, lawyers, businessmen and journalists. Television stations and newspapers have been taken over by entities affiliated to the security forces and muzzled.

Yet Sisi has throughout enjoyed healthy relations with western governments. They have been happy to welcome the president to their capitals and sell Egypt arms. Despite its economic woes, Egypt was one of the top five importers of weapons between 2017 and 2021, according to the Stockholm International Peace Research Institute.

> The regime has released about 800 political prisoners this year, even as it arrested others, in a sign that it was concerned about its reputation ahead of the climate summit

Western diplomats talk of the need for "quiet diplomacy" when dealing with the regime, and of the strategic importance of a traditional partner and the Arab world's most populous nation. That should not absolve them from using their diplomatic and economic leverage to pressure Sisi. Indeed, the regime has released about 800 political prisoners this year, even as it arrested others, in a sign that it was concerned about its reputation ahead of COP27.

Yet Sisi has stubbornly refused to release Abdel Fattah, who was granted UK citizenship last year, and many more have been arrested this year. In a letter to Abdel Fattah's sister on the eve of COP27, UK prime minister Rishi Sunak, who attended the summit last week, said his government was "totally committed" to resolving the activist's case. US President Joe Biden, who also attended, promised to put human rights at the top of his foreign policy agenda. It is time to deliver on those promises.

Opinion Environment

Climate tech 2.0 still has a one per cent problem

Pilita Clark

Billionaires hate not getting their way. But that was the situation Andrew Forrest found himself in a year ago at the COP26 climate conference in Glasgow.

The Australian mining magnate was trying to set up a meeting with world leaders to promote green hydrogen, a technology using renewables rather than fossil fuels that he is betting will be central to the global energy transition. He sounded out leaders from King Charles down, to no avail. "There just wasn't enough interest," he told an FT conference at this year's COP27 meeting in the Egyptian resort of Sharm el-Sheikh.

One year on, it's a very different story. Forrest was one of several chief executives invited to a COP27 green hydrogen investment roundtable co-chaired by Egypt's President Abdel Fattah al-Sisi and Germany's Chancellor Olaf Scholz.

> The question is, can new technology really help to ward off the gathering crisis?

"The whole mood has changed," he said. "Green hydrogen is now big."

And it is not alone. As concern about global warming rises, climate tech is starting to attract record interest — and funding. Much of this new tech has been on display at COP27, where a series of green hydrogen deals was announced by countries eager to ramp up supplies.

The question is, can new technology really help to ward off the gathering climate crisis? Or is it a costly distraction from the need to dramatically scale up the wind, solar and other climate tech we already have?

Not long ago, I would have said the answer was obvious. Global emissions must nearly halve by 2030 to have any hope of saving the slipping goal to limit global warming to 1.5C, so the focus needs to be on rolling out all existing tech as fast as possible.

But having hosted the latest series of the FT's Tech Tonic podcast, I've had a minor change of heart.

For "Climate tech to save the planet", I watched a machine in Iceland suck carbon dioxide out of clean air and scientists trying to unlock the revolutionary promise of nuclear fusion. I spoke to a start-up founder convinced he can build a supersonic jet powered by green aviation fuel, and people working to make green hydrogen mainstream, including Forrest.

I saw enough to think some of these new technologies might develop and fall in cost much faster than expected.

Of course, we have been here before. In the bloodbath known as clean tech 1.0, investors threw some $25bn into start-ups from 2006 to 2011 and ultimately lost more than half their money.

Since then, the industry has learnt important lessons, not least the need to be more patient with technologies still in the lab. And today's money flow is impressive. Private-sector fusion companies alone had raised nearly $5bn by June this year, most of it in the preceding 12 months.

Many companies, not just fusion groups, have made important scientific or manufacturing advances and their leaders are clearly committed to efforts that have consumed years of their working lives. But the main factor that made me think again is the speed at which some technologies are making it to the marketplace.

That was obvious at COP27, where I spoke to Andrea Fuder, chief purchasing officer at the Volvo Group, one of the world's biggest truckmakers.

She explained how, in April last year, the group announced plans to use fossil-free steel in its products, made with green hydrogen by Sweden's SSAB steelmaker. Six months later, it unveiled a prototype hauler machine made with the greener steel and, just eight months after that, it delivered a finished machine to the Nordic construction group NCC.

"That's super fast," said Fuder, adding customer demand is so strong that Volvo might be able to fully switch from conventional steel to the fossil-free version by the 2030s — if it can find enough supplies.

Supply volumes matter. They point to what I've come to think of as climate tech's one per cent problem. Green hydrogen made up about one per cent of global supply last year. Sustainable aviation fuel's share was even smaller. Direct air capture machines are sucking in an even tinier fraction of global carbon emissions and fusion energy is years away from powering a grid.

No wonder COP27 attendees who voted on 12 net zero policies in a poll at South Korea's pavilion overwhelmingly plumped for existing tech: renewables such as wind and solar topped the chart with 22 per cent of the vote on Monday, versus a puny one per cent for direct air capture.

Most new climate tech will not develop quickly enough to make a difference in the short-term but, considering the scale of the problem, any that can make fast advances are welcome news indeed.

pilita.clark@ft.com

Letters

Email: letters.editor@ft.com
Include daytime telephone number and full address
Corrections: corrections@ft.com
If you are not satisfied with the FT's response to your complaint, you can appeal to the FT Editorial Complaints Commissioner: complaints.commissioner@ft.com

Malawi's 'deep bed farming' may relieve Africa's water crisis

Michelle Williams's article ("Africa's fragile food and water security threatens us all", Opinion, November 10) is correct to call for action to support and scale innovation on the African continent. But her prescription to expand access to groundwater on the basis that most countries have enough to last decades needs to be examined much more carefully for two reasons.

First, it would be of little benefit to the majority of farmers who cannot afford to invest in expensive irrigation schemes and who must rely on rainfed agriculture. Second, we need to be thinking much further ahead than "decades" because unless groundwater is replenished faster than it is withdrawn it is a finite resource.

In Malawi we are uncovering the widespread existence of a hard layer of soil (hardpan) at varying depths below the soil surface, caused by the constant passage of farmers' feet, years of hoe cultivation, machinery, vehicles and animal hooves.

Although the nature of the layer varies by soil type, its overall effect is to prevent rainfall from penetrating into soil to the depths that plant roots need and, by extension, into the groundwater. By breaking up the hardpan with a pickaxe and then learning how to manage the soil to catch and retain as much rainfall as possible, farmers are able to ensure that the water percolates into the soil, subsoil and the aquifer.

This form of "deep bed farming" ensures that the water is available to crops for far longer through the growing season which stabilises and increases yields: more than 30,000 farmers in Malawi are now using this indigenous innovation with the direct benefit of very large increases in yields and wider benefits to livelihoods as wells remain fuller and intermittent streams run for longer.

Extracting groundwater may be necessary in some areas, but without a commitment to replenishing the aquifers through regenerative approaches to agriculture it can only be a very short-term solution.

Isaac Monjo Chavula
Country Director, Tiyeni, Mzuzu, Malawi
Colin Andrews
Tiyeni Board Chair, Fordingbridge Hampshire, UK

A plea to the chancellor to rethink energy windfall tax

There are no easy choices for Jeremy Hunt, the UK chancellor ahead of this week's Autumn Statement ("Chancellor lines up big tax rises and spending cuts: Dire predictions for the nation's finances spur effort to reduce public borrowing", Autumn Statement, November 15).

At a moment of national hardship it's right that we all play our part. But the recent energy profits levy (EPL) on UK oil and gas producers does not, as the chancellor said on October 17, target "genuine windfalls". The associated investment credit will not offset lasting damage to UK industry and jobs.

Independent companies like Harbour Energy account for half of UK oil and gas investment and production. We have invested twice as much as major oil companies since 2017.

Our businesses use capital to acquire assets from larger companies, and reinvest in them to extend their life, contributing to domestic energy supply and sustaining UK jobs.

We are also beginning to invest in repurposing infrastructure to store millions of tonnes of CO_2 each year, helping the UK meet its energy transition targets and create new jobs for thousands.

For companies like ours to invest, we need to borrow. To borrow, we are required to hedge our commodity price risk. This means we do not realise the benefit of market oil and gas prices. Yet we are taxed as those that do and have already seen a more than 50 per cent increase in UK tax.

The average UK independent producer has seen their share price fall by more than 20 per cent since the EPL announcement. In the same period, the share price of the UK-listed majors has increased by almost 10 per cent and US independents have seen an increase of over 25 per cent. Increased pressure from our global providers of capital for geographic diversification should surprise no one.

Should the chancellor levy UK oil and gas companies further — a second time in six months — he risks driving investment out of the UK altogether.

He will do so at a time when investment — both in production and transforming infrastructure for CO_2 capture and storage — is critical to the UK's energy security and longer-term energy transition.

Linda Z Cook
Chief Executive Officer, Harbour Energy London SW1, UK

Chair of Trade Remedies Authority defends stance

Regarding your article "Aluminium sector warns of threat from low tariffs" (Report, November 7) you are quite wrong to argue that the Trade Remedies Authority has had a "faltering start" because we adjusted our initial recommendation to increase duty on specific Chinese imports of steel-reinforcing bars following new evidence brought by the UK steel industry.

The whole purpose of publishing a "statement of essential facts" is to give affected parties the opportunity to review the TRA's conclusions, comment and add further input ahead of our final determination. The industry brought new evidence to us, we gathered more up-to-date material from public sources than had previously been available, and we responded on that basis: when the facts change, like Keynes we may change our minds.

As all sectors should be aware, the TRA's responsibilities are not just to domestic producers, but also to UK consumers and to the maintenance of competitive markets. We approach all evidence from involved parties including exporters and foreign governments, "without fear or favour", a stance I imagine the FT supports.

Simon Walker
Chair, Trade Remedies Authority Reading, Berkshire, UK

How Biden aids the party and bolsters his legacy

I was disappointed to learn that President Joe Biden recently reiterated his desire to run again in 2024 ("Joe Biden intends to run in 2024 with announcement 'early next year'", Report, FT.com, November 9).

The president is 79-years-old and he's been showing his age over the past couple years. Biden's career in public service is commendable but exiting at the appropriate time would benefit his party and bolster his legacy.

Let's hope Biden makes the right call, and opens the door to a lively Democratic primary contest in 2024.

Taylor Dibbert
Washington, DC, US

Released savings glut is US inflation villain of the piece

Glenn Hubbard's analysis of the primary cause of the current US inflation, including comparisons with the decade after the 2008 financial crisis, appears to neglect two critical factors ("Post-pandemic fiscal spending bears much of the blame for US inflation", Opinion, November 15).

The first is that the pandemic created a suppressed demand, with consumers saving what they normally would have spent, then unleashing these savings in a torrent with the end of the pandemic. The American Rescue Plan Act, a bipartisan piece of legislation, added to this liquidity, and in this way enhanced inflation. Hubbard's analysis, to be fair, ought to have disaggregated these two streams. Was government spending or the released savings glut the primary villain of the piece?

Second, Hubbard points out that inflation remained low in the decade after 2008, indeed "on target" with the Federal Reserve's 2 per cent goal, while fiscal policy, in contrast to 2020, remained weak, suggesting that this may have been the model the Biden administration ought to have followed.

Yet the real problem in the 2008-18 interval was the threat of deflation, and a very slow, protracted recovery, which caused the Fed to inaugurate its bond-buying programme to gin up liquidity. Barack Obama's stimulus package economists widely regarded as inadequate. This was the result of Republican efforts to limit it, and because much of it needed to be spent on shoring up US states' finances which had collapsed in the great recession.

The weak fiscal policy of this period, rather than being a model to emulate, should more accurately be regarded as an albatross. Perhaps Biden's American Rescue Plan Act erred on the margin in its generosity, but I suspect that the real culprit in causing the current inflationary spiral was the increased liquidity coming from consumers' released savings.

Emeritus Professor Albion M Urdank
University of California, Los Angeles Los Angeles, CA, US

FT app has a strange way of recruiting readers

While scrolling through your app, I reach the Explore section, where you invite me to "Take a break from the news with our recommended stories for you". A little further down at the crossword it's "Take a break from the news with today's crossword". As a leading business newspaper you must have lots of expertise in this area, but isn't it strange that you are trying to turn your customers away from your main product?

Jonathan Lynn
London SW1, UK

Over-50s can do more than plug the labour gap

As we see the proportion of workers over 50 in hospitality roles increasing in the UK ("Bars and restaurants turn to over-50s to plug labour gap", Report, October 10), I agree with the stance taken by Kathy Dyball, the director at Caterer.com whom you quote, that employers taking on older candidates is a step in the right direction.

However, where she argues that more roles "that can suit people of any working age" need to be highlighted, I find myself in disagreement. Isn't the onus on employers to make jobs with them more accommodating to an ageing workforce?

Despite what McDonald's adverts may suggest, many older people are not "retiring types". However, ageist working practices lead many over-50s to either give up looking for new opportunities or retire, disillusioned, from jobs they once enjoyed.

Employers have a significant opportunity now to not just lure older people back to the labour market, but make people want to stay in work well past the age of 50 by creating a culture that celebrates age diversity. For example, recruiters should give equal weighting to skills and experience, so older candidates who need training aren't discounted. Multi-generational collaboration within the workplace, through projects and older employees training the younger, will also help older workers to contribute and feel fulfilled by their roles.

Rather than simply plugging labour gaps, employers can make a change that will benefit the over-50s, their employers and generations to come. When we are in a cost of living crisis that's only being made worse by a tightened labour market, why not run with this opportunity?

Steve Butler
Chief Executive, Punter Southall Aspire London WC2, UK

Don't forget perpetuals pay a coupon every six months

With regard to George Soros's recent column "Issuing perpetual bonds would show that Sunak is serious" (Opinion, November 1), bonds with a call date are not perpetual. They can be called against the investor.

Forty years ago it was common for the Bank of England to issue gilts with a pre-determined range of redemption dates, ie Treasury 13.5 per cent 2004-2008. Pension funds and insurance companies hated them and the practice stopped. Secondly, not having to repay the principal in 40 years time is no big deal. The discounted present value is negligible. It's paying the coupon every six months which is the real cost to the Treasury.

Tony Smith
Bishop's Stortford, Hertfordshire, UK

Opinion

This was the year liberal democracy fought back

POLITICS
Janan Ganesh

Just don't call it an *annus mirabilis*. There has been too much suffering in Ukraine for that.

What *is* in good taste — and crucial to do — is to name the many ways in which the west has rallied this year. Autocrats are good at fitting individual setbacks for the US and its friends, such as the withdrawal from Afghanistan, into a story of inexorable decline. So when events go the other way, liberals should bang their own drum. The year has spoilt them for examples.

Emmanuel Macron became the first president of France to win re-election since 2002. He retired Marine Le Pen in the process. The most successful electoral politician in the west is a Molière-quoting centrist and former banker. Imagine being told that amid the populist pomp of 2016.

The UK began the year with Boris Johnson as prime minister and ends it with Rishi Sunak, which is a moral upgrade if nothing else. Even Liz Truss, in a short stint that was still too long, did some perverse good for the nation's governing institutions. The Treasury, the central bank, the fiscal watchdog: each was undermined, each was vindicated, each now stands enhanced. No politician will challenge them for a while, which is a problem of its own. This was also the year that Brexit died, if not as a fact of life then as a project that inspires. Former enthusiasts disown it or blame its meagre returns on poor implementation.

Elsewhere in the world? Jair Bolsonaro washed out after one term as president of Brazil. Nato is getting wider, as Sweden and Finland attempt to join, and deeper, as the German defence budget goes up. As for the mightiest of all democracies, dare to hope. Congressional Republicans did not take the Kremlin line, or anything like it, on Ukraine. Midterm voters punished candidates who bore the stamp of Donald Trump. A second political life for the man himself is less probable now, if still plausible.

> What the autocrats have lost in 2022 is more precious than votes. It is the aura of competence

True, there were populist breakthroughs in Italy and Israel. Much of the rich world is souring on free trade, a sop to nativism that will go as well as it usually does. But an overall account of the year would show the autocrats and their friends to be in arrears: reputationally, not just electorally.

What the enemies of liberalism have lost in 2022 is more precious than a series of votes. It is the aura of competence. This time last year, Vladimir Putin was still grudgingly credited in parts of the west with a sort of primal cunning. Even the most contrarian finance bro hesitates to do that now. It was also common to hail the executive grip of the Chinese state as the US shambled its way to 1mn Covid-19 deaths. Or to gawp at its economic feats. On both scores, China watchers have grown less impressed.

More than the gas reserves, more than the "carrier-killer" missiles, what the authoritarian world believes it has over the west is effectiveness. The idea that autocracy works, that answering material human needs is more truly democratic than holding elections, is serious enough to deserve a counter. It has purchase in the "global south", wherever that is, and in the west itself, where the firm smack of government polls alarmingly well. But it is a hostage to fortune. It can't easily survive a botched conscript war or lockdown-induced economic malaise. Dictators can just about afford to look callous. They can't afford to look inept.

If the attack on Ukraine was shocking, the way it went wrong was familiar to the point of banality. There was the absence of feedback and self-correction within the system (Truss, as damning as her rise was of British public life, was gone in 44 days). There was the refusal to credit that other nations are capable of nationalism. There was the Marxian belief that history has a set course in which liberalism is weeded out like a faulty gene. This is how strongmen have over-reached since at least the first half of the 20th century. Their real competence is hanging on to that spurious reputation for competence. Western credulity helps.

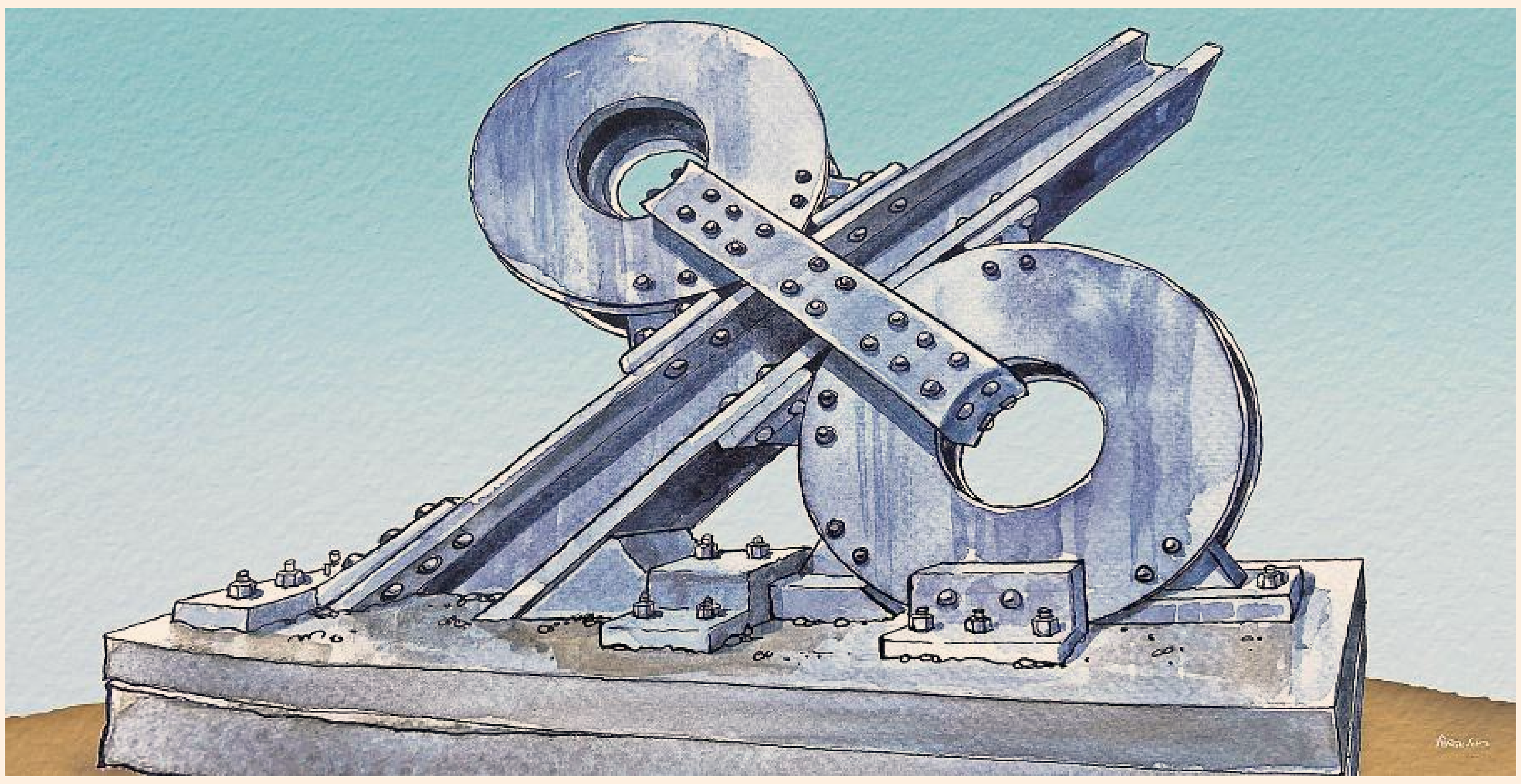
This column has dealt in the absolutes of "liberalism" and "autocracy". But much of the world lies between the two models. Victory, if we can speak of such a thing, consists in luring these waverers. Some of this is about invoking "values". Most of it is about being, or seeming, the strong horse. There was a time, before and during the pandemic, when that was the autocrats' club. How sure it was of being the way of the future. Then came the most fortifying year for the west in a long time. There is little reason to be complacent, and even less to be magnanimous.

janan.ganesh@ft.com

Central banks are right to act decisively

Martin Wolf Economics

A worse possibility than disinflation being done too slowly would be if policymakers gave up too quickly



Price stability is the responsibility of the Federal Reserve and serves as the bedrock of our economy. Without price stability, the economy does not work for anyone. In particular, without price stability, we will not achieve a sustained period of strong labour market conditions that benefit all." Thus did Jay Powell, chair of the Federal Reserve, open his press conference after the meeting of the Federal Open Market Committee on November 2 at which it was decided to raise the rate on federal funds by 0.75 percentage points to 4 per cent. He was right. It is the duty of the state to ensure that its money has a predictable value. Central banks are entrusted with this task. Recently, they have been failing badly. It is a necessity and an obligation to rectify this failure.

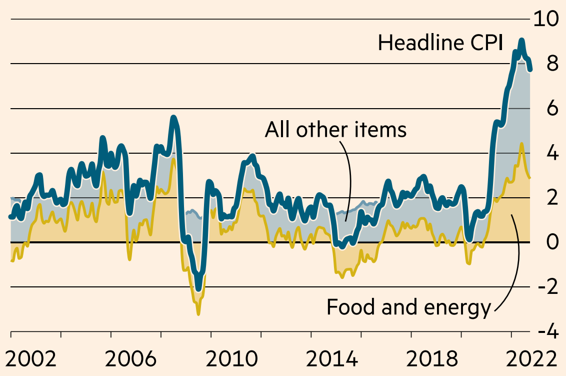
Between September 2019 and September 2022, headline levels of consumer prices, which are the ones relevant to people, rose 15.6 per cent in the US, 14.1 per cent in the UK and 13.3 per cent in the eurozone. If central banks had hit their targets, these price levels would have risen just over 6 per cent.

There are good excuses for this failure, notably the disruptions caused by Covid-19 and then Russia's war on Ukraine. Yet the outcome is not just due to supply shocks. In the three years to the second quarter of 2022, nominal demand expanded 21.4 per cent in the US, 15.8 per cent in the UK and 12.5 per cent in the eurozone. This is equivalent to compound annual growth of 6.7 per cent in the US, 5 per cent in the UK and 4 per cent in the eurozone. These rates of growth of demand are simply inconsistent with 2 per cent inflation in these economies, especially in the US and UK.

Not so long ago, many worried that inflation had been too low for too long. In August 2020, the Fed duly announced a new "Statement on Longer-Run Goals and Monetary Policy Strategy". In this it stated that "following periods when inflation has been running persistently below 2 per cent, appropriate monetary policy will likely aim to achieve inflation moderately above 2 per cent for some time". It is hard to argue that the subsequent inflation overshoot has been "moderate". More importantly, it has transformed the history. In the US and UK, the price level increase over the past decade is equivalent to a compound annual increase of 2.5 per cent. At the end of this decade, that level is some 6 percentage points higher in both countries than it would have been if the price target had been hit. Yet people are not arguing that symmetry now demands sub-target inflation, maybe at 1 per cent for six years. In the eurozone, in contrast, inflation over the past decade is now back to the target of 2 per cent.

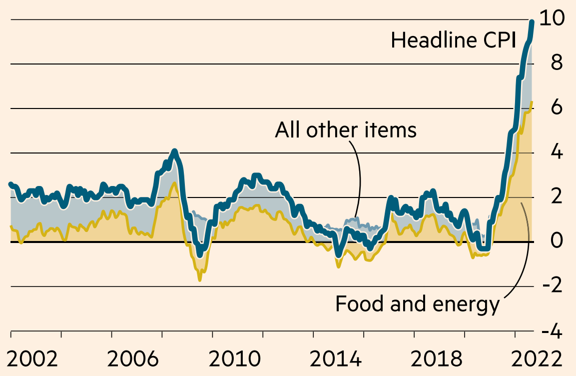
The idea that one should correct for bygones was not sensible. But if people conclude that central banks will only offset past low inflation, not past high inflation, and that inflation shocks are more probable than deflation shocks, too, they might reasonably conclude that inflation will not average 2 per cent.

Inflation other than in energy and food has soared in the US
Contributions to US CPI inflation (%)



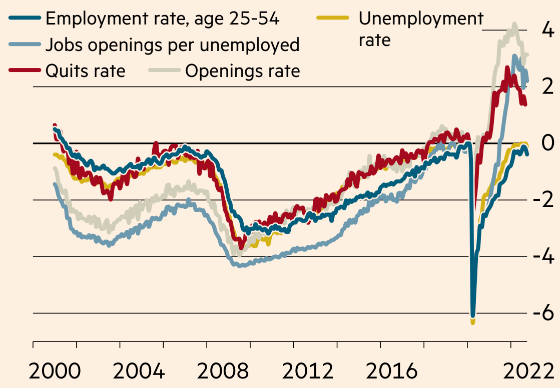
Source: IIF

In the eurozone, rising costs other than in energy and food have also driven up inflation
Contributions to eurozone CPI inflation (%)



Source: IIF

The US labour market is weakening, but it remains very strong
Standard deviations since Feb 2020



Source: Furman & Powell, Peterson Institute for International Economics

This view will be reinforced by the fact that central banks adopt ultra-loose policy more enthusiastically than they do the reverse. In sum, people will think that they have a clear inflation bias.

This is not just ancient history, far from it. It ought to shape what central banks do now. This is particularly true in the US, where the contribution of presumably temporary rises in energy and food prices is smaller than elsewhere and so the domestic factors in inflation are far more important. (See charts.)

> The longer inflation remains high, the further the price level will go above what it should be

This history strengthens the already strong case for getting back to the target sooner rather than later. Thus, the longer inflation remains high, the further the price level will go above what it should be and so the bigger the cumulative losses for those who trust the stability of money. This will stoke anger. It will also make it more essential for the losers able to do so to recoup their losses. That will make wage-price and price-price spirals more durable. Furthermore, the longer inflation remains above target, the more likely inflation expectations are to be fundamentally "de-anchored". That would make the task of restoring credibility harder and the costs of doing so greater. The worst possibility of all would be not for disinflation to be done too slowly, but for policymakers to give up too quickly, making it necessary to do it all over again in even worse circumstances. That, too, will be more likely if the disinflation is too long drawn out.

Against this, it will be argued that there are risks of creating financial turmoil and an unnecessarily deep global recession, possibly even tipping economies into Japanese-style chronic deflation. This is indeed a danger. It is why the scale and duration of past fiscal and monetary support was a mistake, especially in the US, as Lawrence Summers of Harvard has long argued.

Yet it is hard to argue that an interest rate of 4 per cent is too tight in an economy with a core inflation rate of 6.3 per cent. This is even truer of the Bank of England's 3 per cent and the European Central Bank's 2 per cent. If the US and global financial systems cannot survive even these low rates, they are in unforgivably bad shape.

Past policy mistakes have interacted with a series of big shocks to generate high inflation. Those mistakes are real and significant, however. It is noteworthy, for example, that comparable shocks to energy and food prices in the early 2000s did not generate inflation as high as today's in the US. Aggregate demand has also been unsustainably strong, again especially in the US. This has to be corrected, both firmly and fast, if the foundations of renewed growth are to be laid. The risks of tightening are real. But those of letting inflation become entrenched are greater. As Macbeth says, if one has to do something hard, "'twere well / It were done quickly."

martin.wolf@ft.com

Scotland can no longer rely on Westminster's economic stewardship

Nicola Sturgeon

During the Scottish referendum campaign in 2014, people in Scotland were told that if we voted No to independence, we could rely on the stability of Westminster's stewardship of the economy.

That message of stability, founded as it was on the UK's supposed economic strength (of which EU membership was a key part) dominated the messaging of anti-independence politicians. However, even at the time, the UK was already demonstrating what has become its defining economic characteristics — low growth, low productivity and deep inequality.

As a result of the disastrous decision to leave the EU — against the wishes of the overwhelming majority of people in Scotland — this inherently weak and unstable economic model seems now to be hardwired into the UK's future.

The Bank of England is warning that the UK is about to enter the longest recession since the 1930s, and its analysis clearly shows that specific "UK factors" are making things worse. One of those is undoubtedly Brexit. Yet, despite growing evidence of the harm it is doing, none of the main UK parties is calling for its reversal. Indeed, the Labour leader Keir Starmer is now at one with the UK government on the issue. Labour has become a pro-Brexit party with a pro-Brexit leader.

That merely confirms what has now been apparent for some time: the only way for Scotland to regain EU membership and the economic benefits it brings is as an independent country. Since 2016, support for EU membership in Scotland has climbed higher still. Indeed it seems to be on the rise now in England too. Labour's conspiracy of silence on Brexit is therefore not only deeply damaging economically, but by the time the next general election comes round may prove to be a profound strategic mistake.

> As an independent country, we could thrive as a member of the EU in our own right

It is beneath these darkening Brexit clouds that the chancellor, Jeremy Hunt, will this week deliver his Autumn Statement. Given that he has already warned of decisions of "eye-watering difficulty", we can be sure that big cuts to public spending, as well as significant tax rises, are on the way. There has been much talk of the need to fill a so-called "black hole" in the UK's public finances of perhaps £40bn to £55bn — figures that have been made worse by wrong-headed political decisions and are based on uncertain forecasts of how to bring down debt as a share of gross domestic product.

It is also vital to remember that any further cuts will come as public services are still recovering from the last period of austerity and from Covid-19, and as they are struggling with the impact of inflation. The budget of the Scottish government, for example, is worth £1.7bn less than when it was set in December as a result of inflation, yet we have not received a single additional penny from the UK government.

Fiscal sustainability is, of course, essential, but hammering public services with a new wave of austerity is likely to prolong the recession and make long-term sustainability harder to achieve. When the millstone of Brexit and the home secretary's enthusiasm for reducing immigration are added to the mix, any prospects for growth look even bleaker.

It is against this backdrop that the Scottish government is renewing its economic case for independence. We have set out how an independent Scotland could thrive under a new economic model, based on our abundant renewable energy resources, a new social partnership approach, greater workplace rights, a migration policy tailored to our needs and becoming a member of the EU in our own right, inside a huge single market which, by population, is seven times the size of the UK.

We've set out plans for a £20bn investment fund, using borrowing powers and the oil revenues that will remain while we make the transition away from fossil fuels, to kick-start growth in a newly independent country.

There are no guarantees of success. But it is instructive that independent European countries comparable to Scotland such as the Nordics, Ireland, Austria and Switzerland have higher national incomes per head and lower inequality than the UK.

There will of course be significant transition issues for us to confront and work through and we have set out proposals that will enable a move from the low-growth, high-inequality UK economic model to a better independent future.

We don't know the detail of what is to be in the chancellor's statement tomorrow, but one thing is already clear — to build a more prosperous and fairer future, Scottish independence is not only desirable, it is now essential.

The writer is first minister of Scotland

Lex.

Twitter: @FTLex

Windfall taxes: uncertainty principal

Government dithering over whether to raise windfall tax has resembled death by a thousand paper cuts for UK energy groups. Jeremy Hunt is expected to put them out of their misery soon.

The chancellor is tomorrow tipped to impose a 40 per cent tax on "the excess returns" of electricity generators. He may increase sectoral levies on North Sea oil producers from 25 per cent to 35 per cent.

It is unclear whether these taxes would be purely retrospective. If so, sympathetic economists will argue they will not deter investment. It is the kind of point favoured by people with debating skills stronger than their street smarts. Reactive policymaking might be expected to merit a broad discount from global investors.

Hunt's likely targets are generators operating under Renewable Obligation Contracts, such as biomass specialist Drax and some older offshore wind farms. Drax should nearly double its operating profit this year.

Older nuclear generators, including Centrica, will be in the chancellor's crosshairs too. They make less use of forward hedges, therefore making more money when power prices soar. Gas turbine generators would also be hit since they are passing on steep natural gas prices.

Academics have found higher taxes deter investment by increasing the cost of capital. That was the presumed effect back in 1997, after Tony Blair's new Labour government laid a tax on generators that had been privatised the decade before. However, the sky did not fall in for the sector, notes Stuart Adam at the Institute for Fiscal Studies.

This year, negative effects are already apparent. UK gas generators that usually put in orders for turbines this quarter have not done so, according to Credit Suisse. Meanwhile, Ignacio Galán, chair of Spanish utility Iberdrola has said that 87 per cent of the Spanish utility's investment will go to foreign markets in 2023-25. He is unhappy about Spain's tough domestic price controls on his industry.

But critics of windfall taxes, including Lex, have a problem. Our case against these levies is theoretical and partly anecdotal. The need for the government to raise taxes is clear and urgent. Asked why he robbed banks, armed thief Willie Sutton said: "That's where the money is". Amid soaring energy group profits, Hunt might pragmatically make the same point.

TSMC: Buffett thinks it's fab

Never invest in a business you do not understand. Warren Buffett's advice from 30 years ago still guides many investors. Yet the same advice meant that the Sage of Omaha missed out on the early gains of companies such as Google and Amazon. He has not left it too late to benefit from Taiwan Semiconductor Manufacturing Co.

The Taiwanese chipmaker ranks as one of the biggest Asian tech investments ever made by Buffett's Berkshire Hathaway. It took a stake of more than $5bn in TSMC during the three months ended in September, according to filings.

Berkshire's holding is way behind its stake in Apple. The latter is worth about $130bn and accounts for more than 40 per cent of the equity portfolio.

That level of conviction in the devices maker should have spurred Berkshire to invest sooner in TSMC. The company makes most of the advanced chips for Apple's products, ranging from phones to computers.

Another timing issue is that the chip industry is on a shaky footing. A glut started pushing prices down last month. Demand for smartphones and computers is falling.

Shares of TSMC have plunged 43 per cent from peak to trough this year.

Buffett says his company's favourite holding period is "forever". He will regard impending profits weakness at TSMC as a blip. Even after yesterday's gain of 8 per cent, TSMC shares trade at 12 times forward earnings. That is a 25 per cent discount to South Korean peer Samsung Electronics.

TSMC has plenty of upside potential. If it is canny, it should benefit from the race between the US and China to bolster their chip supply chains.

Operating margins of nearly 50 per cent are four times those of Intel. A large cash buffer means TSMC can easily ride out any near-term volatility.

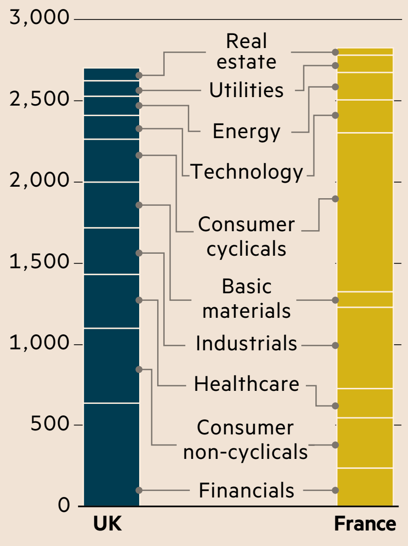
Buffett may not understand the potential of boron arsenide and other chipmaking niceties. But he knows how to read a P&L, a cash flow and a balance sheet.

Financial centres: the judgment on Paris

UK equity valuations have compressed sharply since 2016. The market capitalisation of the UK exchange has also been squeezed, given the high proportion of companies acquired by overseas investors. Meanwhile, the French market is exposed to a growing luxury sector.

Sectoral composition of the UK and French stock markets

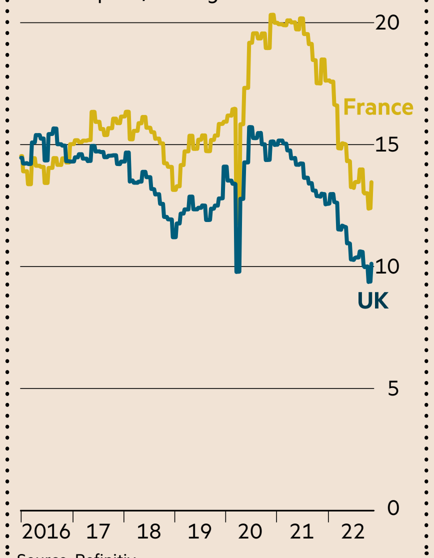
Total market value ($bn)



FT graphic Source: Datastream

The UK stock market has de-rated since 2016

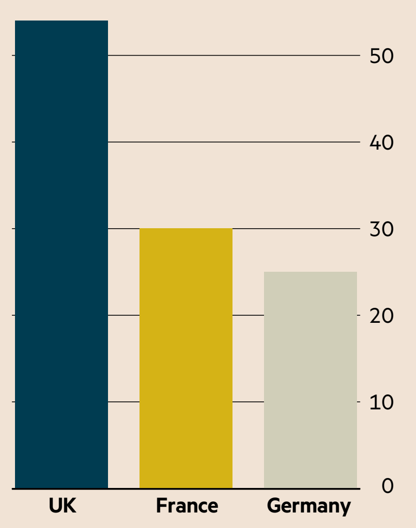
Forward price/earnings ratio



Source: Refinitiv

Companies that have been acquired by overseas bidders

%, 2011-21



Source: Schroders

London has lost its crown as the biggest stock market in Europe — and to Paris, not Germany. Some Britons have reacted with pearl-clutching horror. Understandably so. UK stocks have de-rated sharply. The French capital has always been London's pushiest European financial rival.

But Paris's market capitalisation of $2.8tn tells only part of the story and both exchanges pale in comparison with the performance of the New York juggernaut. UK stocks have performed poorly, it is true. The FTSE 100 is up less than 10 per cent since November 2016 compared with about 45 per cent for the CAC 40.

UK stocks trade below book value, according to research by broker Panmure Gordon. That implies a steep discount to their 30-year average of 1.8 times. That is less of a negative judgment on UK plc than you might think. Both markets are dominated by global giants. About 76 per cent of revenues of UK-listed companies originate overseas, according to an analysis of the MSCI IMI index by Schroders. For France, the figure is more than 80 per cent.

UK-listed companies are set to grow less than European counterparts, said Panmure Gordon. Sectoral reasons help explain why. Well over a quarter of the French market is made up of consumer goods companies — think LVMH, Hermès and L'Oréal. They are expected to have a good crisis.

The UK hosts a lot of cyclical miners, though not the world's largest, BHP of Australia, which recently scrapped its dual listing.

Market value is only one metric, however. Free float is a better measure of the investable market.

On this front, French companies score poorly. LVMH is worth a chunky €354bn. But subtract the stake held by billionaire owner Bernard Arnault and its free float is half that. Add up the stakes of companies that are actually available for institutional investors to trade and London nudges ahead.

While London remains a much bigger centre for international finance than Paris, neither city has any room for complacency. The US stock market — now worth $40tn — is beating everyone into a cocked hat.

Walmart: living the LIFO

Same-store sales, margins, inventory levels — some of the metrics investors look at for retail stocks. These days, they must also get to grips with LIFO, FIFO and COGS.

Walmart is the latest to flag this alphabet soup. The $400bn retail giant yesterday said it expected LIFO charges to shave $1bn off its gross profit for next year. The disclosure — made during a call with analysts — comes after the company delivered better than expected third-quarter results and said full-year earnings would not fall by as much as feared.

LIFO stands for "last in first out". Under LIFO, companies assume the goods they sell first are the newest in inventories. In a high inflation environment, newer goods cost more than older ones. This means the cost of goods sold (COGS) will be higher, reducing profits.

The flipside is FIFO — or "first in first out". This accounting method, commonly used by sellers of perishable goods, assumes companies draw down older inventory first, meaning older, cheaper goods get expensed as COGS.

About 15 per cent of companies in the S&P 500 used LIFO as their primary inventory method and half used FIFO last year, according to Credit Suisse. The rest used an average-cost method or methods that could not be determined.

Walmart generated $147bn in gross profit last year. The $1bn hit is marginal and also prudently large. Still, understanding how LIFO works helps put inventory and margin numbers in perspective. Walmart said yesterday it had "significantly improved" its inventory position in the third quarter. This stood at $64.7bn at the end of October, up from $57.5bn a year ago.

There are fewer inventory writedowns under LIFO during inflationary periods, accounting experts say. That reduces potential shocks to investors. But it does not absolve retailers such as Walmart from their responsibility to predict trends intelligently and manage stock leanly.

Ukraine: a $1tn investment challenge

A Ukrainian roadshow visits London this week. Delegates hope to identify investment opportunities. This may seem ludicrously premature. The flag of Ukraine has only fluttered over Kherson for a day or two. Russia has retreated, not been defeated. Nevertheless, it is time to start planning for the best as well as preparing for the worst.

Roadshows are these days termed "investor education". Plenty of schooling will be needed to explain a reconstruction effort that could cost upwards of $1tn. That would be about six times the real-terms size of the US Marshall Plan for Europe after the second world war.

So far, reconstruction funding has mainly come from foreign governments, multilateral agencies and development banks. An estimated $400bn of Russian assets frozen overseas may also be deployed. But foreign private sector investors should also ponder how they can get involved.

For the moment, buying Ukrainian eurobonds is the easiest way to register confidence in the country's independent future.

Yields have moved in line with progress in the war. Russia's recent retreat from Kherson delivered a fillip. But returns still reflect huge uncertainties. One US dollar eurobond bearing a 6.75 per cent coupon and maturing in 2028 yields 46 per cent.

Peace would need to be in sight to justify a big rally. Even then, debt restructuring seems inevitable. Both are distant prospects.

One sensible proposal is for a new international agency to identify bankable projects, raise capital by issuing bonds and even make equity investments.

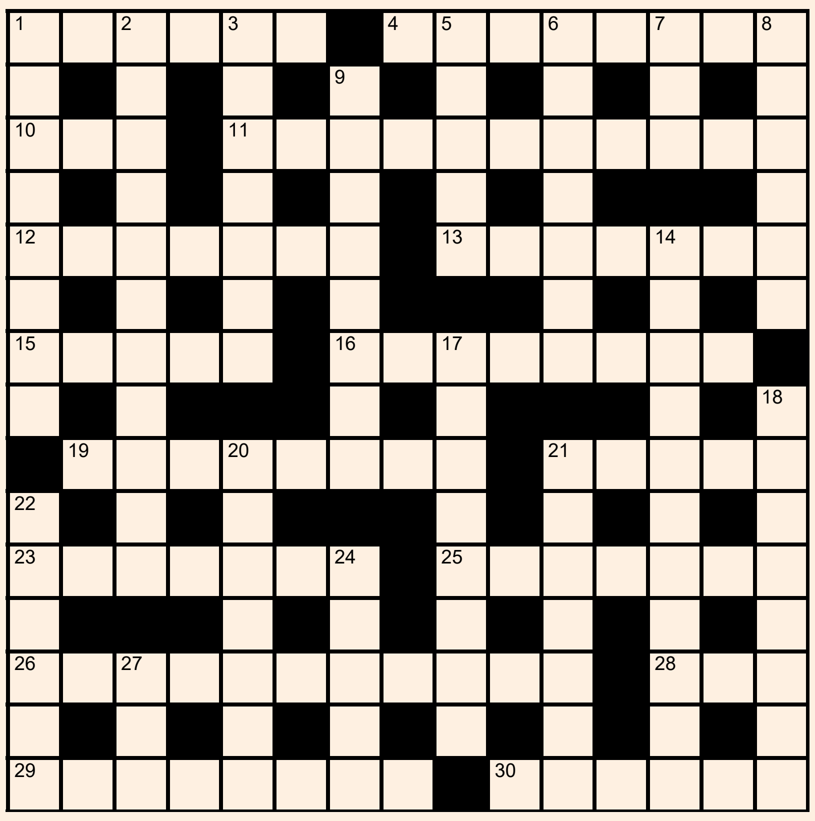
Ukraine was riddled with corruption before the war. A $1tn reconstruction effort would be a fresh magnet for chicanery. After a Ukrainian victory, Volodymyr Zelenskyy would need to be as implacable a foe of crooked oligarchs as he has been of Russia.

FT **Lex on the web**
For notes on today's stories go to **www.ft.com/lex**

NIKKEI Asia The voice of the Asian century

CROSSWORD

No 17,253 Set by MONK



ACROSS

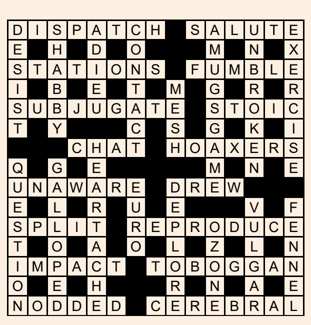
1 They go round back of French passes (6)
4 Adult drug shaped like a star (8)
10 Renegade filibuster stripped of his external prize (3)
11 Original meanings of old record in English stymie novel (11)
12 It doesn't collide with ball bearing, ruined (3,4)
13 Perhaps from which we'd find rain hit unexpectedly? (4,3)
15 Entering Egypt, stole old enemy vessel (1-4)
16 European weapon for fencing maybe Polish? (8)
19 Clan member cutting lines on most of tree trunk (8)
21 Willow's more promising when pollarded (5)
23 Stuff to burn after husband's done a bunk (7)
25 About to check tree in crater (7)
26 Identify round spring linked to furious knocking (11)
28 Put away hater, saving skin (3)
29 Disease makes most of beasts die, sadly (8)
30 Ingenious answer, right? (6)

DOWN

1 Tight tie tangled with beard (8)
2 Hinder harangue about Italy in decline (11)
3 Busy with small, stolen glance (7)
5 Animal is singular -- exactly! (5)
6 Soft porn books stashed by Heather (7)
7 Heads of international boxing organisation held up belt (3)
8 Teacher caught in act scratching bottom itch (6)
9 In discussion, still interrupting Eeyore -- sadly, that's not right (3,2,3)
14 Playing Gaelic harp on Love Island series? (11)
17 Catholic, Celtic accent essentially jarred (8)
18 Widest minor route is in Paris (8)
20 Fanciful charge for peeping Lords, at least (7)
21 Bound dictionary, unusually glib inside (7)
22 Nearly pick out cheated mercenary (6)
24 United Artists holding up commerce (5)
27 Worthy men led my son -- all may follow this great wave (3)

JOTTER PAD

Solution 17,252



Get the business insights you need to succeed in Asia
Visit asia.nikkei.com